



CP430/PMD430



marantz®

model CP430/PMD430

Stereo Cassette Recorder

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound. Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS:

Parts can be ordered either by mail or by telex. In both cases, MARANTZ part number has to be specified. If you order by mail, fulfil MARANTZ order forms.

MARANTZ S.A.
EUROPEAN PARTS DEPARTMENT
2, Avenue Léopold III
B-7120 PERONNES-lez-BINCHE
BELGIUM
TWX: 57589 SEPLT B

MARANTZ NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
Phone: 1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

PARTS ORDERING:

Parts may be ordered from the following addresses:

EUROPE

MARANTZ S.A.
European Parts Department
2, Avenue Léopold III
B-7120 Péronnes-lez-Binche
Belgium

MARANTZ S.A.
326 Avenue Louise Bte 32
1050 Bruxelles
Belgium

MARANTZ AUDIO U.K. LTD
Unit 15/16
Saxon Way Industrial Estate
Moor Lane
Harmondsworth UB7 0LW
Great Britain

MARANTZ AUSTRIA Ge.M.B.H.
25 Franz Lisztgasse
2380 Perchtoldsdorf
Austria

MARANTZ BELGIUM
45 Rue Auguste Van Zande
1080 Brussels
Belgium

MARANTZ DENMARK
Bregnerødvej 132b
3460 Birkerød
Denmark

MARANTZ FRANCE
4 Rue Bernard Palissy
92600 Asnières
France

**MARANTZ GERMANY
G.M.B.H.**
Max Planckstrasse 22
6072 Dreieich 1
Germany

MARANTZ ITALIANA S.p.A.
Via Monte Napoleone 10
20121 Milano
Italy

MARANTZ NEDERLAND B.V.
Wagenmakersweg 3
3449 HV Woerden
Netherlands

AUSTRALIA

MARANTZ AUSTRALIA PTY
19 Chard Road
Brookvale, NSW 2100
Australia

U.S.A.

MARANTZ COMPANY, INC.
National Service Dept.
P.O. Box 577
Chatsworth, CA 91311
U.S.A.

JAPAN

MARANTZ JAPAN, INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan

MARANTZ SVENSKA A.B.
Svartviksvägen 56
Träneberg
Bromma
Sweden

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

NOTE—FOR U.S.A. ONLY

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If, for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

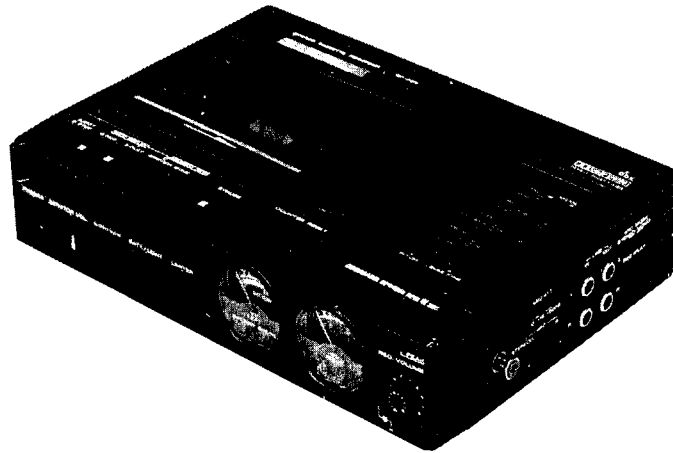
Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from MARANTZ NATIONAL PARTS DEPARTMENT.

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MODEL CP430/PMD430 STEREO CASSETTE RECORDER



INTRODUCTION

This service manual are prepared for use by Authorized Warranty Station and contains service information for Marantz Stereo Cassette Recorder.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the Cassette Recorder.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can be usually obtained through local suppliers.

1. SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or front Panel of product and controls and chassis button.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before return to user/customer.

Ref. UL Standard NO. 1270. Para 66. 3. D (Mandatory Test after servicing Electrical Appliances, effective 7-1-83).

2. P.W. BOARDS

As can be seen from the circuit diagram, the chassis of your Cassette Recorder consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Rec/Play Amp mounted on P.W. Board PK01
2. TAPE EQ AMP mounted on P.W. Board PJ01
3. ATT Switch mounted on P.W. Board PK03
4. L.E.D. mounted on P.W. Board PX02
5. Mecha Control mounted on P.W. Board PM01
6. Control Switch mounted on P.W. Board PS01
7. Light mounted on P.W. Board PX01
8. Mic Mode mounted on P.W. Board PK02
9. Dolby NR L mounted on P.W. Board P601
10. Dolby NR R mounted on P.W. Board P602

3. TEST EQUIPMENT REQUIRED FOR SERVICING

For measuring or checking your Cassette Recorder, the following instruments and materials are necessary.

- VTVM
- Audio Oscillator (AF OSC)
- Attenuator (600 Ω)
- Oscilloscope
- Bandpass Filter (1 kHz)
- IEC A-Curve Filter
- Wow and Flutter Meter
- Torque Meter (Cassette Type)
- Digital Frequency Counter
- Distortion Meter
- Blank Tapes (Completely erased with bulk eraser)
 - TDK AC-212 (Normal)
 - TDK AC-512 (Special/CrO₂)
 - TDK AC-712 (Metal)

NOTE: If any doubt is noted in a measured value, use new tape.

- | | |
|--------------|---|
| • Test Tapes | (New Tape) |
| MTT-111 | Wow and Flutter, Tape Speed |
| MTT-112 | Measurements of Output Level |
| MTT-112B | Signal-to-Noise Ratio |
| MTT-150 | Adjustment of Output Level |
| MTT-256 | Frequency Response (for Normal) |
| MTT-356 | Frequency Response (for Special/CrO ₂ and Metal) |
| MTT-121 | Cross Talk |
| MTT-141 | Channel Separation |

4. MECHANISM AND CIRCUIT DESCRIPTION

4.1 Muting System

The muting circuit is provided to reduce the pops noise when generates on the Line Out at power ON/OFF.

1) When power is turned on

As the base voltage of QU03 is higher than the emitter voltage during the charge current flows to QU02 through RU03 & RU02, QU03 is ON and it sends the muting voltage.

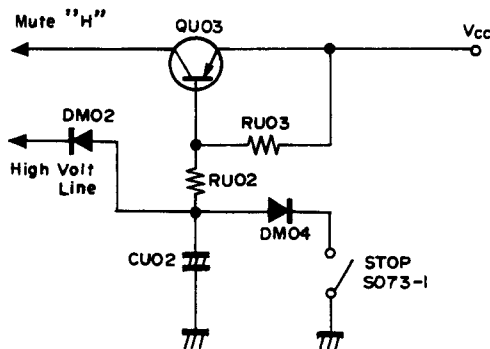
CU02 have been charged up, both the base and the emitter voltages of QU03 is equal. QU03 is OFF and the muting is released.

2) When the STOP button is depressed

When the stop switch S073-1 is ON, the base current flow through DU04. Also discharging CU02, QU03 is ON instantly, the muting system operate to reduce the pops noise at power ON/OFF.

DM02 provides to discharge CU02 on AUTO STOP.

As the muting time is in proportional to capacitance of CU02, it is presetted by matching the threshold time of TAPE EQ Amp.



4.2 Auto PLAY and Automatic Rewind Stop

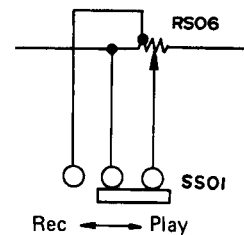
With SS01 set to ON during PLAY, the rewind button will lock when pressed. When counter reaches 999, the rewind lock releases and the PLAY operation resumes. In this condition, both CUE and REVIEW buttons do not operate and both buttons are locked. Also, when the FF button is pressed and locked in place, the lock releases when the counter reaches "900" and the PLAY mode is entered. When the tape has finished winding in both modes before the counter reaches the respective positions, the AUTO STOP function and all buttons are released. Also when the REWIND button alone is locked, the tape rewinds and rewind stops when the counter reaches "999". The same applies for fast forward operation which stops at "900". When the counter is between "900" and "999", both REWIND and FF buttons do not lock.

4.3 Auto Stop

The AUTO STOP function which detects the end of the tape is carried out by hole IC (QM08). The signal from QM08 is added to the pin ④ of QM07, while the auto stop duration is designated inside QM07. The time it takes for the auto stop function to activate after the tape stops, is determined in CM08. At this time $TE = 75 \times CM08$ (μF)mSec, while $TW = 30 \times CM07$ (μF)mSec as long as the auto stop function is operating. When it does not shut off the first time, TE--Tw--TE--TW is repeated until it shuts off.

4.4 Pitch Control

The pitch control is used to vary the tape speed for playback operation. During recording, it is automatically set to the RS06 center position by SS01.



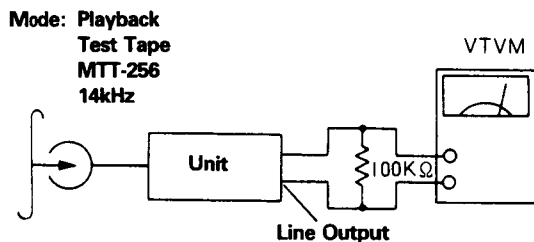
5. ELECTRICAL ADJUSTMENTS

Precautions for Adjustment and Measurement

1. Before playing back the test tape, thoroughly demagnetize the heads, capstan and similar metal parts using an erase, as the test tape-recorded tone is easily erased.
2. Do not place the test tape on any measuring instrument.
3. Do not put the test tape near a place where the eraser is used.
4. Method of Demagnetization: Turn the eraser power switch on at a position far away from the heads. Bring the eraser close to the heads, capstan and other parts to be demagnetized, and move it up and down four or five times to demagnetize. Slowly separate the eraser far away from the parts, and turn the power switch off.
5. Do not use any magnetized adjusting tool. If necessary, demagnetize with a bulk eraser from time to time in the course of each adjustment.
6. Do not turn semi-fixed resistor or coil more than needed.
7. Measure speed and wow and flutter in the normal operating state.
8. Do not apply locking bond excessively.
9. Check the line voltage and the output of low frequency oscillator 2 — 3 times a day to see if they are set as specified.

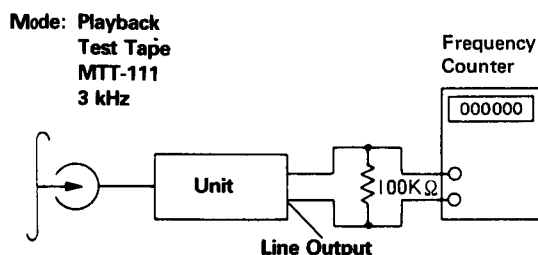
5.1 Head Azimuth Adjustment

1. Play the test tape MTT256 back. Adjust the head azimuth adjusting screw for maximum VTVM reading.
2. If the peak levels of the left and right channels are different set the screws to obtain the mechanical center between the peaks.
3. After adjustment, repeat the playback and stop settings several times to confirm no azimuth deviation.
4. After adjustment, lock the screws with bond.



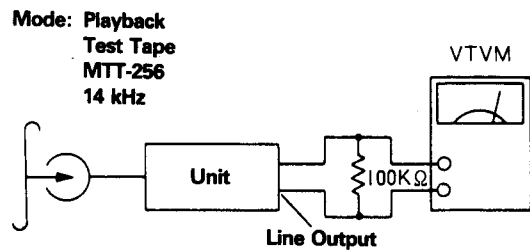
5.2 Tape Speed Adjustment

1. Play the 3kHz signal of the test tape MTT-111 back.
2. Adjust the adjusting resistor (RM05) on the PM01 P.W. Board so that counter readings are between 2990 — 3010Hz.



5.3 Playback Equalizer Measurement

1. Adjust the tape selector switch to NORMAL.
2. Play the 315Hz signal of the test tape MTT-256 back. The VTVM at 0dB.
3. Play the 12.5kHz signal of the test tape back. Confirm a frequency response of 0 to 1dB in reference to the 315Hz signal level. Then, play the 12.5kHz signal back. Set the tape selector to CrO₂, Metal. Confirm the 12.5kHz signal readings at — 4.5dB, ±1dB.

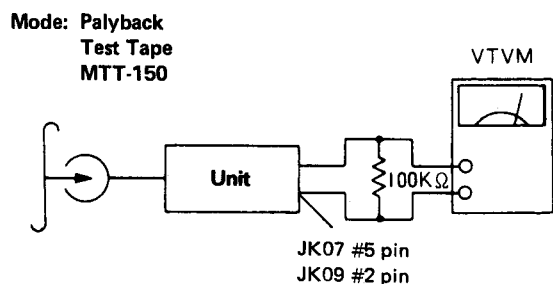


5.4 Playback Level Adjustment

1. Adjust the Tape Selector Switch to NORMAL and turn the NR switch OFF.
2. Play the test tape MTT-150 back. Adjust RK03(L) and RK04(R) so that the voltage of JK07 ⑤ pin and JK09 ② pin is 100 mV. In this operation, make sure the voltage of LINE OUT reads 500 mV + 1 dB.

NOTE:

1. Proceed both for the right and left channels in the same way.



5.5 Level Meter Adjustment

1. Adjust the Tape Selector Switch to NORMAL and turn the NR switch OFF.
2. Play the test tape MTT-150 back. Adjust RK73(L) and RK74(R) at +3dB Level Meter reading.

5.6 Playback Noise Measurement

1. Set the selector switch to NORMAL and NR switch to OFF.
2. Play back the blank tape and make sure that the noise volume is below 2mV when the REC LEVEL Knob is set to both maximum and minimum.

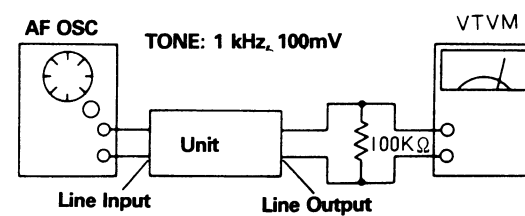
NOTES:

1. Perform measurements when the power hum is at minimum.
2. Perform measurements under conditions where induction noise will not affect measurements.

5.7 MPX Filter Adjustment

1. Adjust the tape selector switch to NORMAL.
2. Put the blank tape in the cassette holder, and set the SK03 in the Source position. (MPX Filter: ON).
3. Add a 1kHz, -20dB signal to LINE IN. Adjust the Rec. Volume knob to 0dB Level Meter reading.
4. Set the input signal at 19kHz \pm 10Hz. Adjust L602(L) and LG61(R) to the minimum level.
If the value is 40dB or more, the adjustment is completed.

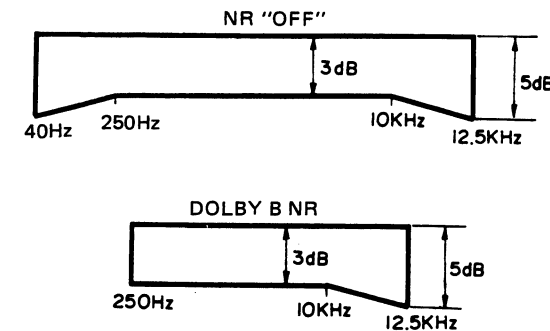
Mode: record



5.8 Record/Playback Frequency Response and Record Level Adjustment

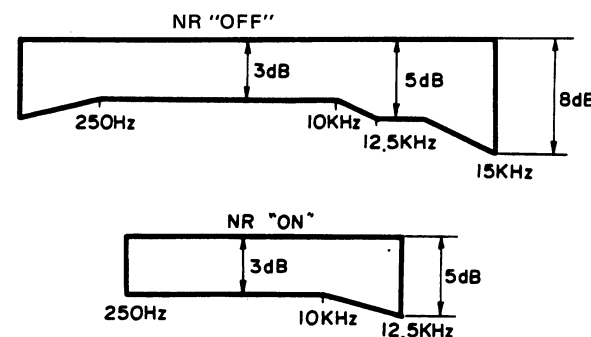
[NORMAL]

1. Set the tape selector switch to NORMAL.
2. Set the MPX filter to OFF and Dolby NR to Dolby B.
3. Insert the AC-212 test tape in the cassette holder and set the recording conditions. Set the monitor switch to SOURCE and attenuate from 1kHz, 500mV to -25dB on Line Out.
4. Set the monitor switch to TAPE and adjust RL07(L) and RL08(R) so that the level for 1kHz and 10kHz is brought within ± 0.5 dB.
5. Adjust RK41(L) and RK42(R) so that the level of 1kHz is the same when the monitor switch is changed from SOURCE to TAPE.
6. After making these adjustment, record and playback at 1kHz, 10kHz, 12.5kHz. Make sure results comply with the following diagram.



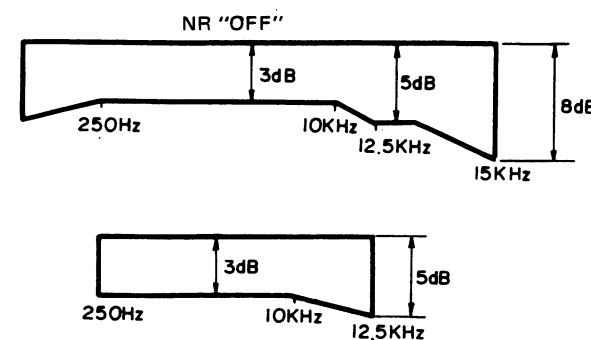
[CrO₂]

1. Set the tape selector switch to CrO₂.
2. Insert the AC-512 test tape in the cassette holder and set the recording conditions. Attenuate from 500mV to -25dB on Line Out with the attenuator and record at 1kHz, 10kHz, 12.5kHz and 15kHz on an unrecorded section of the tape.
3. Record and playback at 1kHz, 10kHz, 12.5kHz and 15kHz. Make sure results comply with the following diagram.



[METAL]

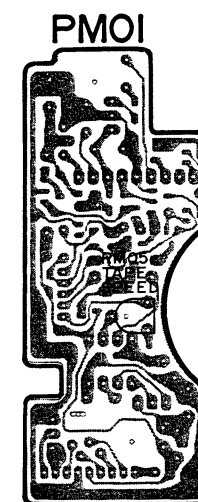
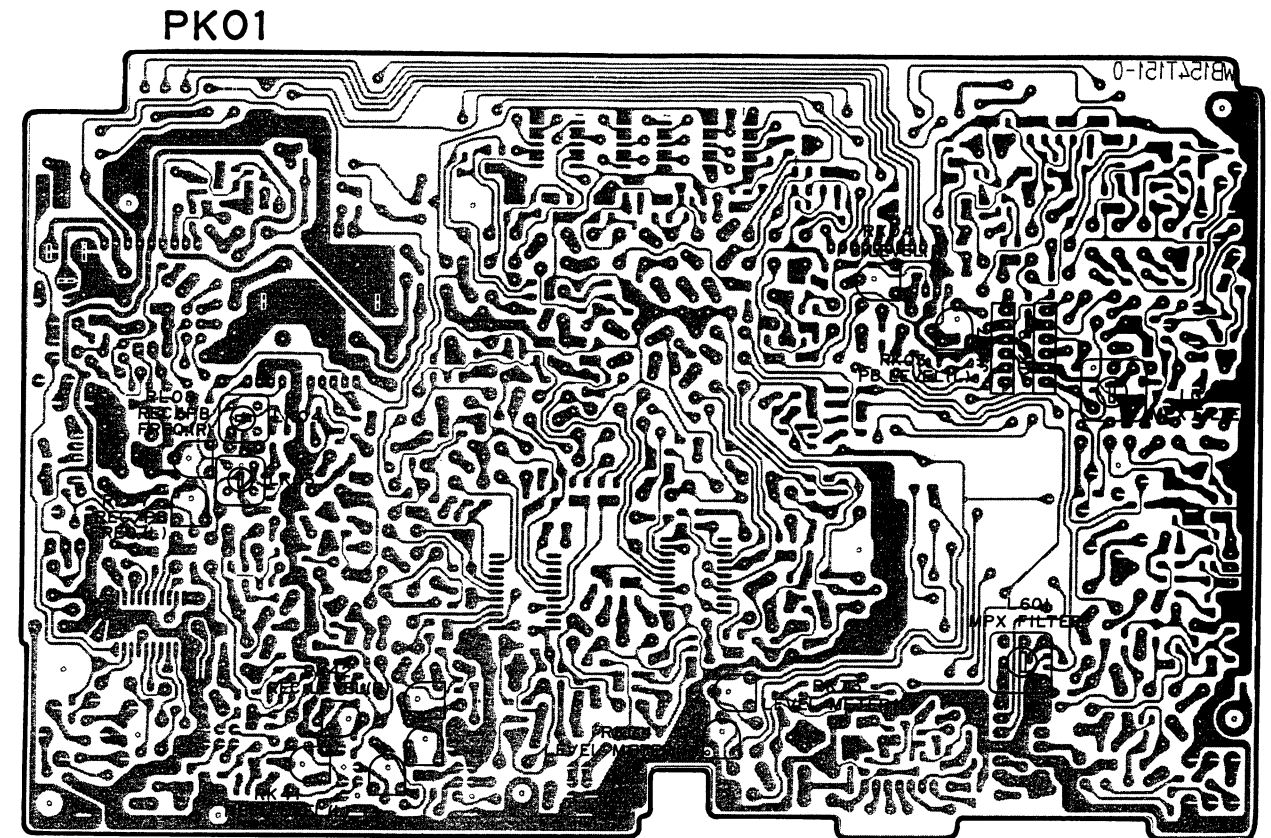
1. Adjust the Tape Selector Switch to METAL.
2. Load the test tape AC-712 into cassette holder. Perform measurements as with CrO₂, and make sure they conform with the Chart.



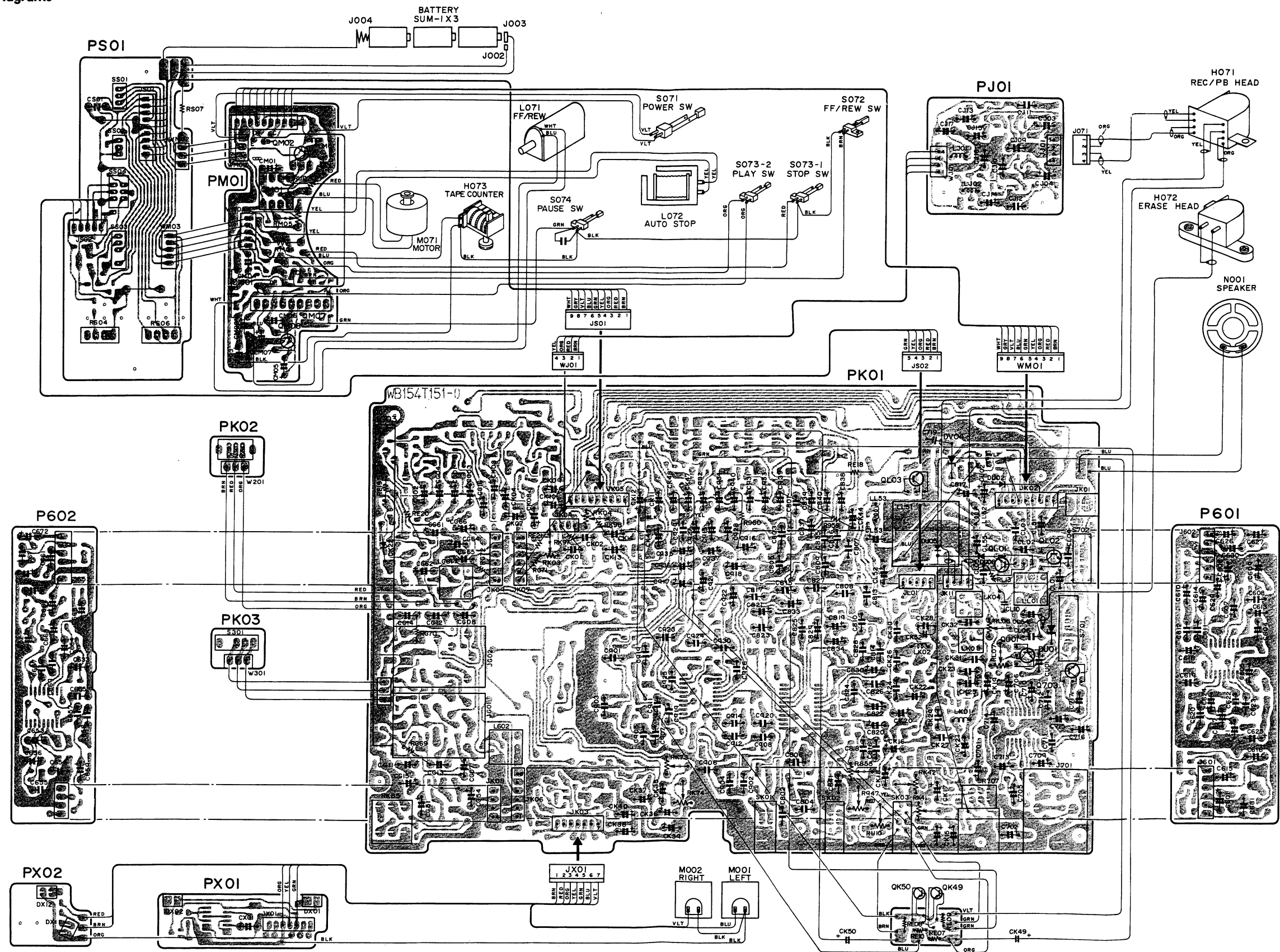
NOTE:

Adjustment points for NORMAL, CrO₂, METAL are common with CB01(L) and CB02(R).

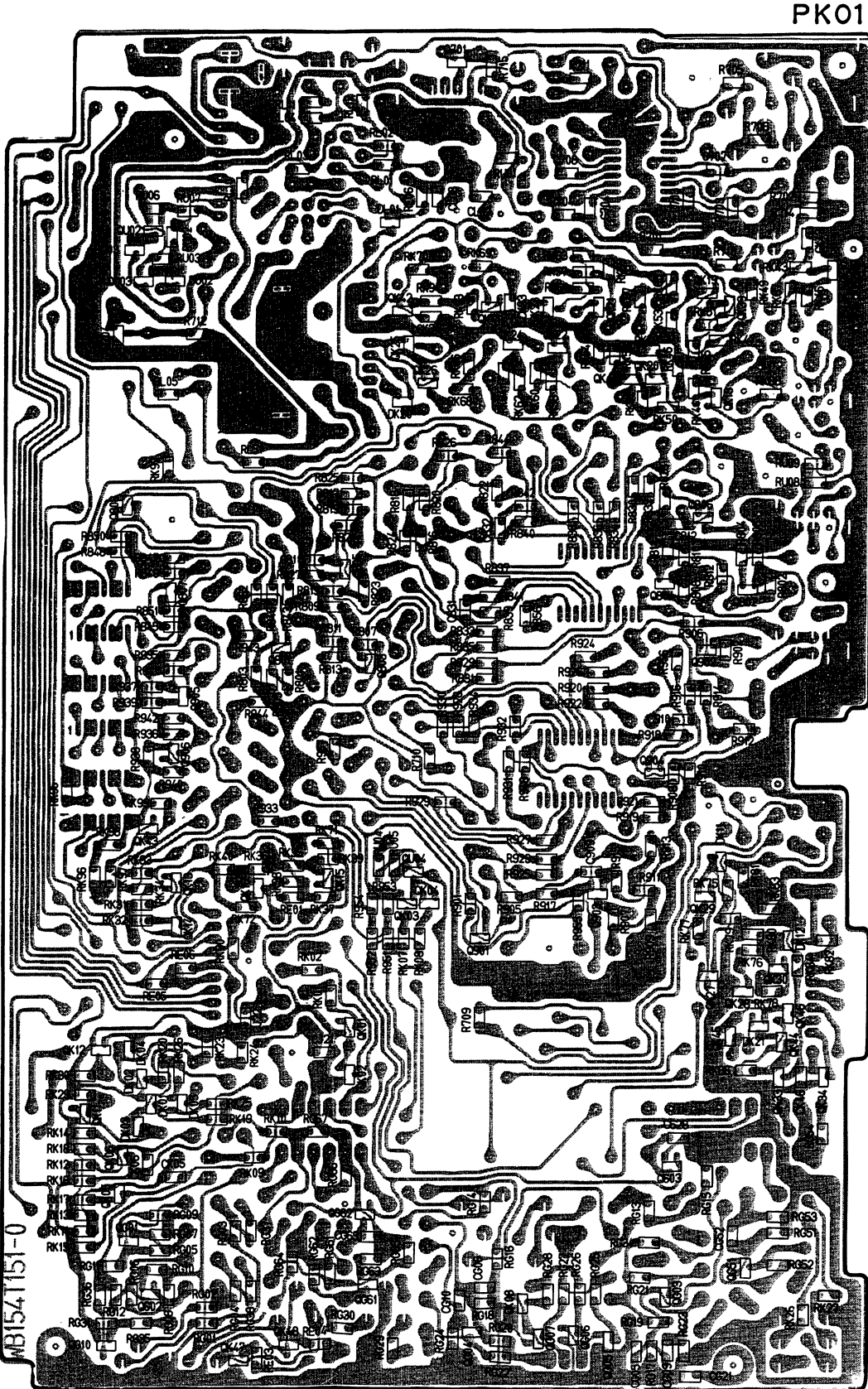
5.9 Alignment Points



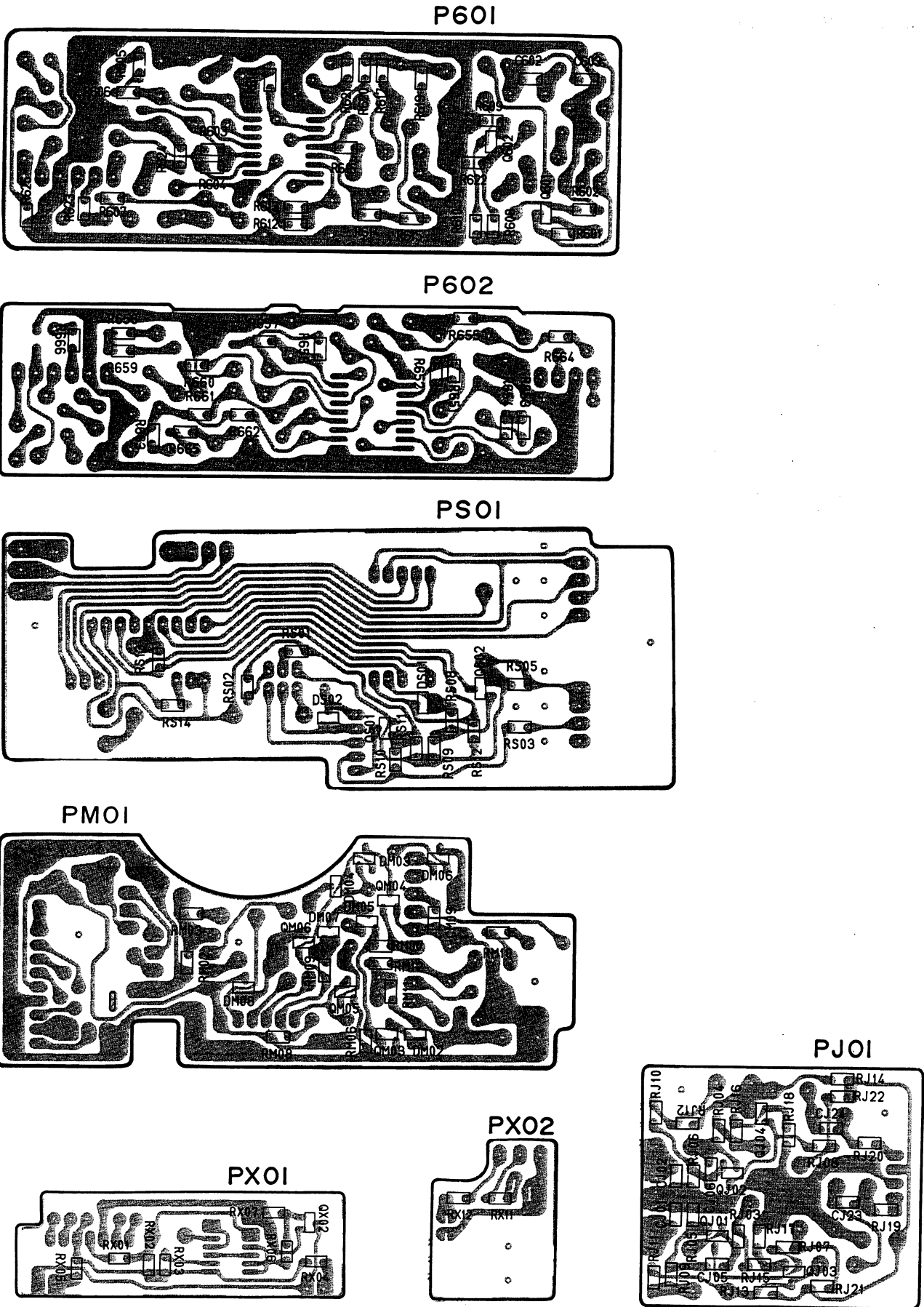
6.1 Wiring Diagrams



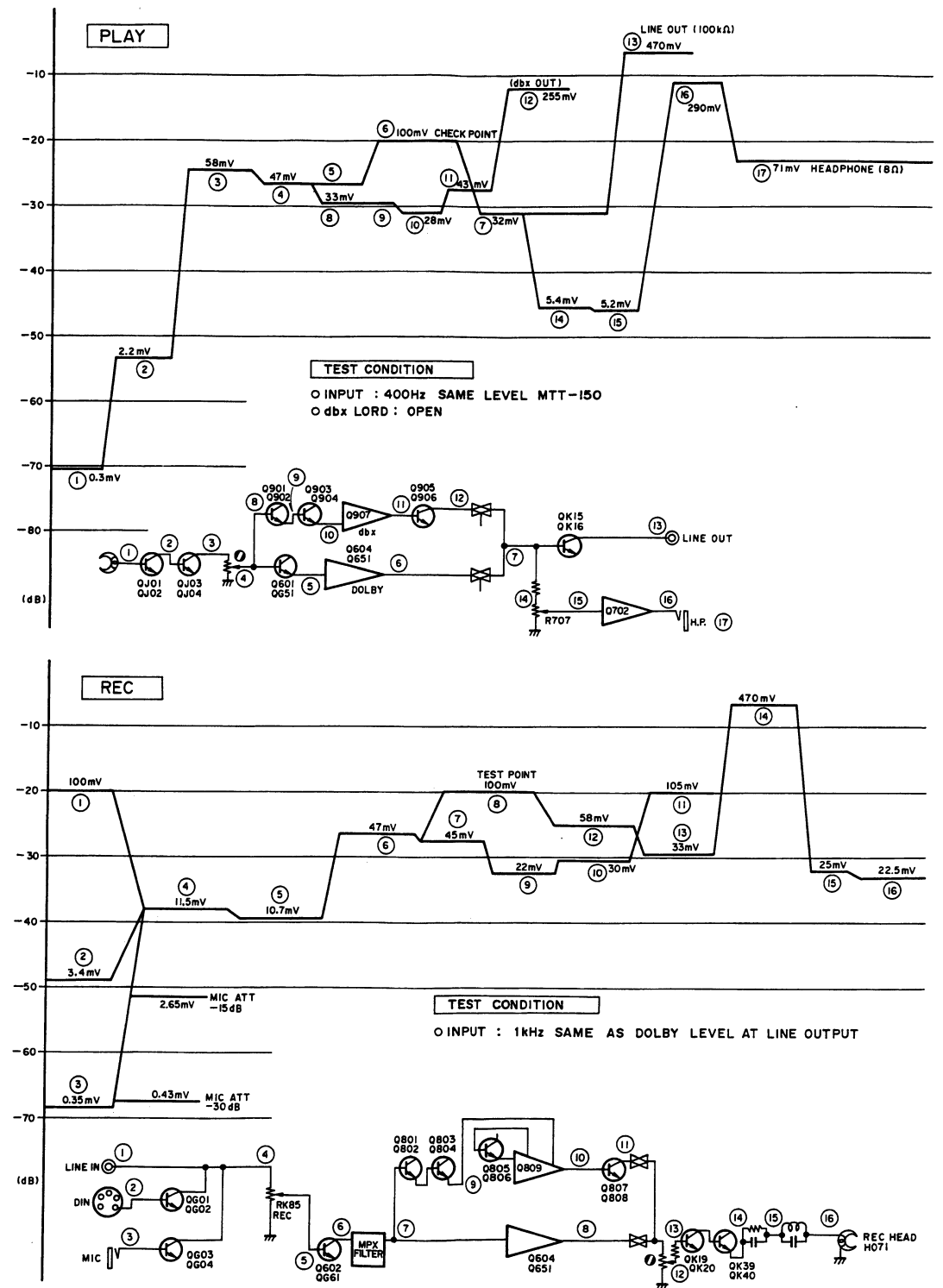
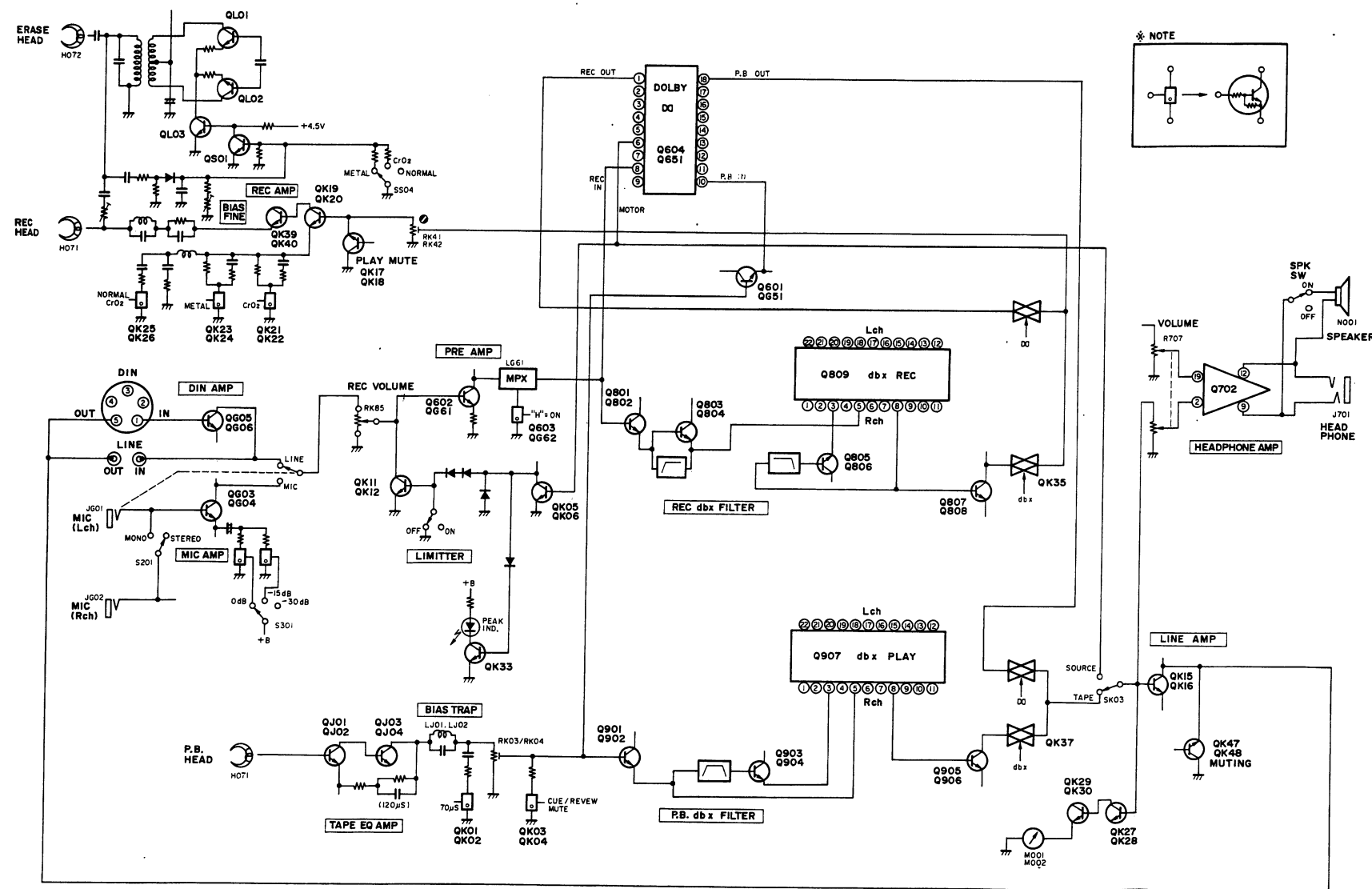
6.2 Chip Parts Component Locations



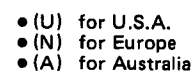
MB1541151-0



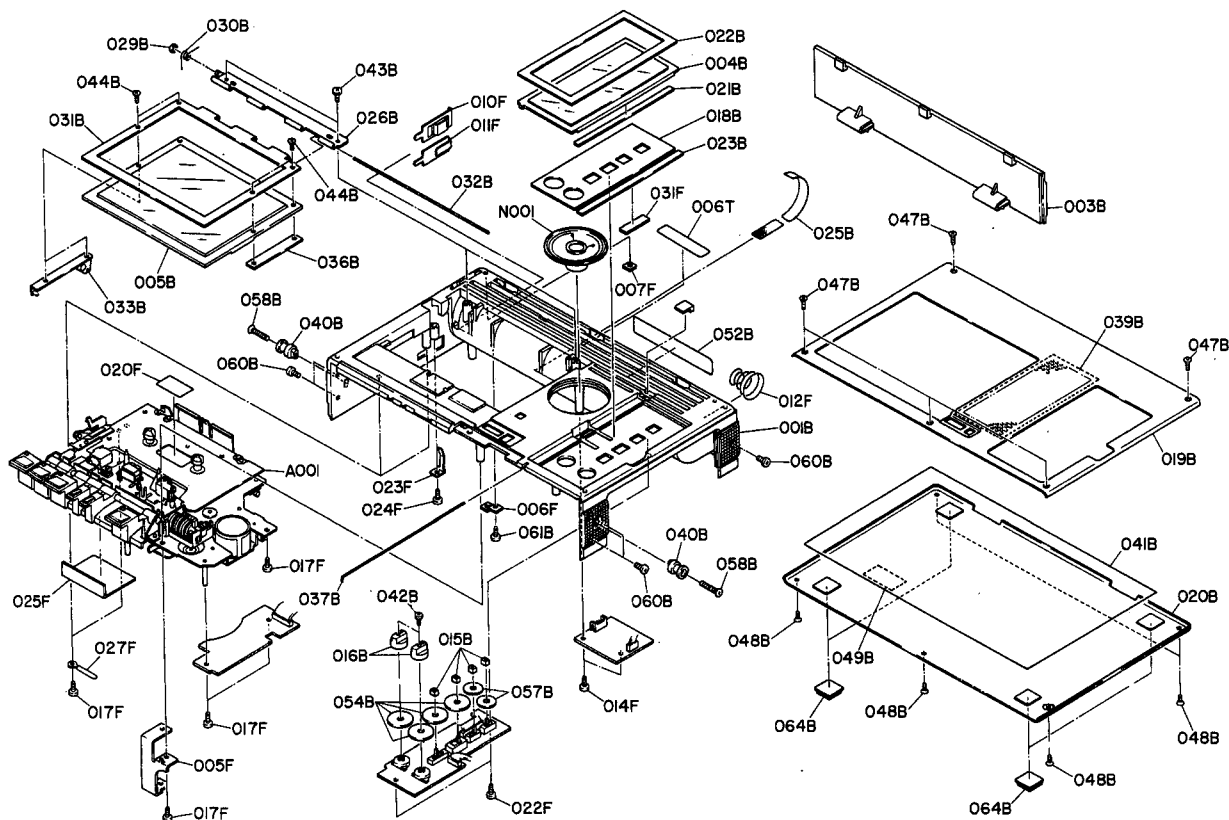
6.3 Block/Level Diagrams



[C01-99] FRONT PANEL AND GENERAL PARTS

12

[C02-99] MAIN CASE AND GENERAL PARTS

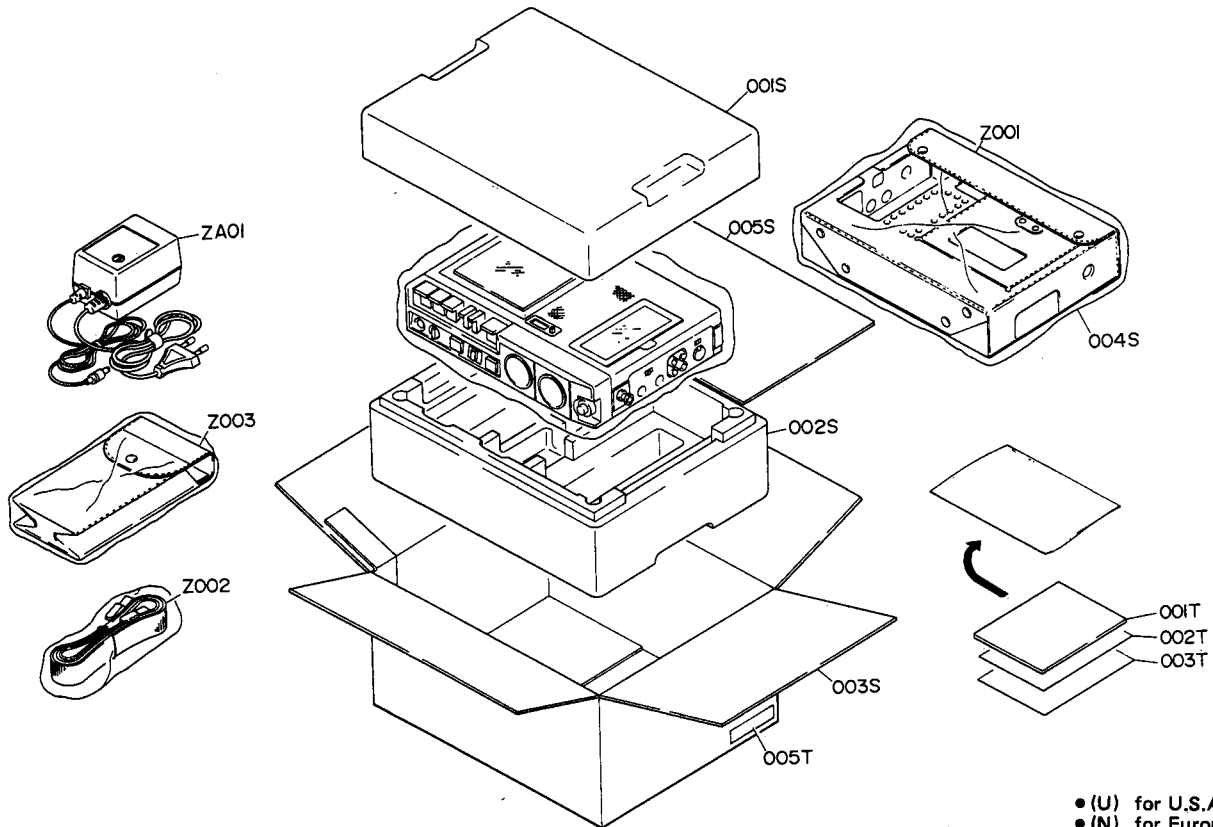


• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
001B	1			153T064040	Case Top
001B		1	1	153T064010	Case Top
003B	1			153T257050	Lid Battery
003B		1	1	153T257010	Lid Battery
004B	1	1	1	153T257020	Lid Control
005B	1	1	1	153T257030	Lid Cassette
015B	4	4	4	153T154060	Knob Slide Switch
016B	2	2	2	153T154070	Knob Pitch/Bias Fine
018B	1	1	1	153T265030	Indicator
019B	1			153T053060	Cover Top
019B		1	1	153T053050	Cover Top
020B	1			153T053070	Cover Bottom
020B		1	1	153T053040	Cover Bottom
021B	1	1	1	153T305010	Magnet
022B	1	1	1	153T063010	Escutcheon
023B	1	1	1	153T060010	Clinger
025B	1	1	1	153T007010	Strip
026B	1	1	1	153T153500	Hinge Assembly
029B	1	1	1	64002500A0	RG Ring, E
030B	1	1	1	153T115090	Spring
031B	1	1	1	153T153020	Hinge Cassette Cover
032B	1	1	1	153T112380	Shaft
033B	1	1	1	153T104500	Retainer Assembly
036B	1	1	1	153T104040	Retainer
037B	1	1	1	153T112370	Shaft Control Cover
039B	1	1	1	153T107010	Sheet Top Cover
040B	2	2	2	153T055010	Collar Top Case
041B	1	1	1	153T120010	Insulator Bottom Cover
042B	2	2	2	51061704S0	P.H.M. Screw P1.7 x 4
043B	2	2	2	51302606U0	P.H. Tapped Screw P2.6 x 6
044B	4	4	4	51840204S0	F.H.M. Screw F2 x 4
047B	5	5	5	51842607S0	F.H.M. Screw F2.6 x 7
048B	5	5	5	51842605S0	F.H.M. Screw F2.6 x 5
049B	1	1	1	4581861010	Label
052B	1	1	1	153T861010	Label
054B	4	4	4	153T303020	Mask
057B	2	2	2	153T303060	Mask
058B	2	2	2	51040318S0	F.H.M. Screw F3 x 1.8
060B	5	5	5	51102606S0	B.H.M. Screw B2.6 x 6
061B	1	1	1	51300306B0	P.H. Tapped Screw P3
064B	4	4	4	153T057000	Leg Cover
005F	1	1	1	153T160080	Bracket
006F	1	1	1	153T104050	Retainer
007F	1	1	1	153T104060	Retainer
010F	1	1	1	153T129010	Terminal
011F	1	1	1	153T129020	Terminal
012F	1	1	1	YL11010090	Terminal (-)
014F	2	2	2	51062605A0	P.H.M. Screw P2.6 x 5
017F	8	8	8	51300308B0	P.H. Tapped Screw P3 x 8
020F	1	1	1	251T274010	Reflector
022F	2	2	2	51300306B0	P.H. Tapped Screw P3 x 6
023F	1	1	1	153T115100	Spring
024F	1	1	1	51300306B0	P.H. Tapped Screw P3 x 6
025F	1	1	1	153T303080	Mask
027F	2	2	2	4220005030	Clasper
031F	1	1	1	4123107070	Sheet
006T	1			2112265010	Indicator Serial No. Card
006T		1	1	2112265110	Indicator Serial No. Card
A001	1	1	1	154T304500	Mechanism Assembly
N001	1	1	1	QK00408030	Speaker 8Ω

[illegible]

[H01-99] PACKING MATERIALS



• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
001S	1	1	1	153T809010	Cushion Top
002S	1	1	1	153T809020	Cushion Bottom
003S	1	1	1	153T801020	Packing Case
004S	1	1	1	154T801010	Packing Case
005S	1	1	1	9013025010	Polyethy Bag
				153T803010	Partitioner
001T	1	1	1	153T851310	User Manual
001T	1	1	1	153T851210	User Manual
002T	1	1	1	154T851320	User Manual Spec Flysheet
002T	1	1	1	154T851220	User Manual Spec Flysheet
003T	1	1	1	9631000090	Warranty Card
003T	1	1	1	154T856010	Circuit Diagram
003T	1	1	1	2818854020	Warranty Card
005T	1	1	1	9526019020	Serial No. Card
005T	2	1	1	9526019060	Serial No. Card
005T	3	1	1	9526019030	Serial No. Card
Z001	1	1	1	153T831010	Carrying Case
Z002	1	1	1	153T156010	Strap
Z003	1	1	1	153T831020	Carrying Case
ZA01	1	1	1	AA90005020	A.C. Adaptor
ZA01	1	1	1	AA90005010	A.C. Adaptor
ZA01	1	1	1	AA12005010	A.C. Adaptor

8. ELECTRICAL PARTS LIST

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
RK01	1	1	1	WB154T1510	PK01-AUDIO/MAIN CIRCUIT BOARD
	1	1	1	ZZ154T1510	P.W. Board Audio/Main
					P.W. Board Assembly
C701	1	1	1	EJ22405010	Elect 0.22μF 50V
C702	1	1	1	EJ22405010	Elect 0.22μF 50V
C703	1	1	1	DK46102300	Ceramic 1000pF ±10%
C704	1	1	1	DK46102300	Ceramic 1000pF ±10%
C705	1	1	1	EJ47601010	Elect 47μF 10V
C706	1	1	1	EJ47601010	Elect 47μF 10V
C707	1	1	1	DK46153300	Ceramic 0.015μF ±10%
C708	1	1	1	DK46153300	Ceramic 0.015μF ±10%
C709	1	1	1	EJ47601010	Elect 47μF 10V
C710	1	1	1	EJ47601010	Elect 47μF 10V
C711	1	1	1	DF15104350	Film 0.1μF ±5%
C712	1	1	1	DF15104350	Film 0.1μF ±5%
C713	1	1	1	EJ22700610	Elect 220μF 6.3V
C714	1	1	1	EJ10700610	Elect 100μF 6.3V
C715	1	1	1	EJ10700610	Elect 100μF 6.3V
C716	1	1	1	EJ10700610	Elect 100μF 6.3V
C717	1	1	1	EJ22700610	Elect 220μF 6.3V
C718	1	1	1	EJ10601610	Elect 10μF 16V
C801	1	1	1	DF15334350	Film 0.33μF ±5%
C802	1	1	1	DF15334350	Film 0.33μF ±5%
C803	1	1	1	DF15334350	Film 0.33μF ±5%
C804	1	1	1	DF15334350	Film 0.33μF ±5%
C805	1	1	1	DF15334350	Film 0.33μF ±5%
C806	1	1	1	DF15334350	Film 0.33μF ±5%
C807	1	1	1	DF15332350	Film 3300pF ±5%
C808	1	1	1	DF15332350	Film 3300pF ±5%
C809	1	1	1	DF15332350	Film 3300pF ±5%
C810	1	1	1	DF15332350	Film 3300pF ±5%
C811	1	1	1	DD45331300	Ceramic 330pF ±5%
C812	1	1	1	DD45331300	Ceramic 330pF ±5%
C813	1	1	1	DF15104350	Film 0.1μF ±5%
C814	1	1	1	DF15104350	Film 0.1μF ±5%
C815	1	1	1	DF15334350	Film 0.33μF ±5%
C816	1	1	1	DF15334350	Film 0.33μF ±5%
C817	1	1	1	DF15333350	Film 0.033μF ±5%
C818	1	1	1	DF15333350	Film 0.033μF ±5%
C819	1	1	1	EJ10601610	Elect 10μF 16V
C820	1	1	1	EJ10601610	Elect 10μF 16V
C821	1	1	1	EV68401670	Elect 0.68μF 16V
C822	1	1	1	EV68401670	Elect 0.68μF 16V
C823	1	1	1	DF15223350	Film 0.022μF ±5%
C824	1	1	1	DF15223350	Film 0.022μF ±5%
C825	1	1	1	DF15472350	Film 4700pF ±5%
C826	1	1	1	DF15472350	Film 4700pF ±5%
C827	1	1	1	DF15104350	Film 0.1μF ±5%
C828	1	1	1	DF15104350	Film 0.1μF ±5%
C829	1	1	1	EJ47600610	Elect 47μF 6.3V
C830	1	1	1	EJ47600610	Elect 47μF 6.3V
C831	1	1	1	DD45331300	Ceramic 330pF ±5%
C832	1	1	1	DD45331300	Ceramic 330pF ±5%
C833	1	1	1	EJ10601610	Elect 10μF 16V
C834	1	1	1	EJ10505010	Elect 1μF 50V
C835	1	1	1	DF15222350	Film 2200pF ±5%
C836	1	1	1	DF15222350	Film 2200pF ±5%
C837	1	1	1	EJ47502510	Elect 4.7μF 25V
C838	1	1	1	EJ47502510	Elect 4.7μF 25V
C839	1	1	1	EJ47502510	Elect 4.7μF 25V
C840	1	1	1	EJ47502510	Elect 4.7μF 25V
C841	1	1	1	EJ22700610	Elect 220μF 6.3V
C901	1	1	1	DF15104350	Film 0.1μF ±5%
C902	1	1	1	DF15104350	Film 0.1μF ±5%
C903	1	1	1	DF15104350	Film 0.1μF ±5%
C904	1	1	1	DF15104350	Film 0.1μF ±5%
C905	1	1	1	DF15332350	Film 3300pF ±5%
C906	1	1	1	DF15332350	Film 3300pF ±5%
C907	1	1	1	DF15332350	Film 3300pF ±5%
C908	1	1	1	DF15332350	Film 3300pF ±5%
C909	1	1	1	DD45331300	Ceramic 330pF ±5%
C910	1	1	1	DD45331300	Ceramic 330pF ±5%
C911	1	1	1	DF15334350	Film 0.33μF ±5%
C912	1	1	1	DF15334350	Film 0.33μF ±5%
C913	1	1	1	DF15333350	Film 0.033μF ±5%
C914	1	1	1	DF15333350	Film 0.033μF ±5%
C915	1	1	1	EJ10601610	Elect 10μF 16V
C916	1	1	1	EJ10601610	Elect 10μF 16V
C917	1	1	1	EV68401670	Elect 0.68μF 16V
C918	1	1	1	EV68401670	Elect 0.68μF 16V
C919	1	1	1	DF15471350	Film 470pF ±5%
C920	1	1	1	DF15471350	Film 470pF ±5%
C921	1	1	1	EJ47600610	Elect 47μF 6.3V
C922	1	1	1	EJ47600610	Elect 47μF 6.3V
C923	1	1	1	DF15472350	Film 4700pF ±5%
C924	1	1	1	DF15472350	Film 4700pF ±5%
C925	1	1	1	DF15223350	Film 0.022μF ±5%
C926	1	1	1	DF15223350	Film 0.022μF ±5%
C927	1	1	1	EJ10601610	Elect 10μF 16V
C928	1	1	1	EJ10505010	Elect 1μF 50V
C929	1	1	1	DF15472350	Film 4700pF ±5%
C930	1	1	1	DF15472350	Film 4700pF ±5%
C931	1	1	1	EJ47502510	Elect 4.7μF 25V
C932	1	1	1	EJ47502510	Elect 4.7μF 25V
C933	1	1	1	EJ47502510	Elect 4.7μF 25V
C934	1	1	1	EJ47502510	Elect 4.7μF 25V
C935	1	1	1	EJ47502510	Elect 4.7μF 25V
C936	1	1	1	EJ47502510	Elect 4.7μF 25V
C937	1	1	1	EJ10701010	Elect 100μF 10V
C939	1	1	1	EJ22505010	Elect 2.2μF 50V
C940	1	1	1	EJ22505010	Elect 2.2μF 50V
CG01	1	1	1	EJ10505010	Elect 1μF 50V
CG02	1	1	1	EJ10505010	Elect 1μF 50V
CG03	1	1	1	EJ10505010	Elect 1μF 50V
CG04	1	1	1	EJ10505010	Elect 1μF 50V
CG05	1	1	1	DK46102300	Ceramic 1000pF ±10%
CG06	1	1	1	DK46102300	Ceramic 1000pF ±10%
CG07	1	1	1	EJ10505010	Elect 1μF 50V
CG08	1	1	1	EJ10505010	Elect 1μF 50V
CG09	1	1	1	DK46102300	Ceramic 1000pF ±10%
CG10	1	1	1	DK46102300	Ceramic 1000pF ±10%
CG11	1	1	1	EJ47601010	Elect 47μF 10V
CG12	1	1	1	EJ47601010	Elect 47μF 10V
CG13	1	1	1	EJ10505010	Elect 1μF 50V
CG14	1	1	1	EJ10505010	Elect 1μF 50V
CG15	1	1	1	EJ22601610	Elect 22μF 16V
CG16	1	1	1	EJ22601610	Elect 22μF 16V
CG21	1	1	1	DK46103300	Ceramic 0.01μF ±10%
CG51	1	1	1	EJ47502510	Elect 4.7μF 25V
CG53	1	1	1	DD45271300	Ceramic 270pF ±5%
CG54	1	1	1	EJ22505010	Elect 2.2μF 50V
CG61	1	1	1	EJ47502510	Elect 4.7μF 25V
CG62	1	1	1	EJ22505010	Elect 2.2μF 50V
CG63	1	1	1	DK46562300	Ceramic 5600pF ±10%
CG64	1	1	1	EJ10701010	Elect 100μF 10V
CG65	1	1	1	EJ22505010	Elect 2.2μF 50V
CG66	1	1	1	EJ22505010	Elect 2.2μF 50V

• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

- | REF.
DESIG. | Q'TY | | | PART NO. | DESCRIPTION | |
|----------------|------|---|---|------------|-------------|--------------|
| | U | N | A | | | |
| CK01 | 1 | 1 | 1 | DF15153350 | Film | 0.015μF ±5% |
| CK02 | 1 | 1 | 1 | DF15153350 | Film | 0.015μF ±5% |
| CK03 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK04 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK05 | 1 | 1 | 1 | DK46102300 | Ceramic | 1000pF ±10% |
| CK06 | 1 | 1 | 1 | DK46102300 | Ceramic | 1000pF ±10% |
| CK07 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK08 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK09 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK10 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK11 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK12 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK13 | 1 | 1 | 1 | EJ47405010 | Elect | 0.47μF 50V |
| CK14 | 1 | 1 | 1 | EJ47405010 | Elect | 0.47μF 50V |
| CK15 | 1 | 1 | 1 | EJ22405010 | Elect | 0.22μF 50V |
| CK16 | 1 | 1 | 1 | EJ22405010 | Elect | 0.22μF 50V |
| CK17 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK18 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK19 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK20 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK21 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK22 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK23 | 1 | 1 | 1 | DF15562350 | Film | 5600pF ±5% |
| CK24 | 1 | 1 | 1 | DF15562350 | Film | 5600pF ±5% |
| CK25 | 1 | 1 | 1 | DF15103350 | Film | 0.01μF ±5% |
| CK26 | 1 | 1 | 1 | DF15103350 | Film | 0.01μF ±5% |
| CK27 | 1 | 1 | 1 | DF15682350 | Film | 6800pF ±5% |
| CK28 | 1 | 1 | 1 | DF15682350 | Film | 6800pF ±5% |
| CK29 | 1 | 1 | 1 | DF15392350 | Film | 3900pF ±5% |
| CK30 | 1 | 1 | 1 | DF15392350 | Film | 3900pF ±5% |
| CK31 | 1 | 1 | 1 | DF15152350 | Film | 0.0015μF ±5% |
| CK32 | 1 | 1 | 1 | DF15152350 | Film | 0.0015μF ±5% |
| CK33 | 1 | 1 | 1 | DD46102300 | Ceramic | 1000pF ±10% |
| CK34 | 1 | 1 | 1 | DD46102300 | Ceramic | 1000pF ±10% |
| CK35 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK36 | 1 | 1 | 1 | EJ47502510 | Elect | 4.7μF 25V |
| CK37 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK38 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK39 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK40 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK43 | 1 | 1 | 1 | DK46102300 | Ceramic | 1000pF ±10% |
| CK44 | 1 | 1 | 1 | EJ10601610 | Elect | 10μF 16V |
| CK45 | 1 | 1 | 1 | EJ10701010 | Elect | 100μF 10V |
| CK46 | 1 | 1 | 1 | DK46103300 | Ceramic | 0.01μF ±10% |
| CK47 | 1 | 1 | 1 | EJ22505010 | Elect | 2.2μF 50V |
| CK48 | 1 | 1 | 1 | EJ22505010 | Elect | 2.2μF 50V |
| CK49 | 1 | 1 | 1 | EJ22505010 | Elect | 2.2μF 50V |
| CK50 | 1 | 1 | 1 | EJ22505010 | Elect | 2.2μF 50V |
| CK51 | 1 | 1 | 1 | EA10701610 | Elect | 100μF 16V |
| CL01 | 1 | 1 | 1 | EJ10701010 | Elect | 100μF 10V |
| CL02 | 1 | 1 | 1 | DF15472350 | Film | 4700pF ±5% |
| CL03 | 1 | 1 | 1 | DF15103350 | Film | 0.01μF ±5% |
| CL04 | 1 | 1 | 1 | DF15103350 | Film | 0.01μF ±5% |
| CL05 | 1 | 1 | 1 | DF15334350 | Film | 0.33μF ±5% |
| CL06 | 1 | 1 | 1 | DF15474350 | Film | 0.47μF ±5% |
| CL07 | 1 | 1 | 1 | DD45221300 | Ceramic | 220pF ±5% |
| CL08 | 1 | 1 | 1 | DD45221300 | Ceramic | 220pF ±5% |
| CL09 | 1 | 1 | 1 | DF15123550 | Film | 0.012μF ±5% |
| ΔCL51 | 1 | 1 | 1 | EA22801010 | Elect | 2200μF 10V |
| ΔCL52 | 1 | 1 | 1 | EA22801610 | Elect | 2200μF 16V |
| CL53 | 1 | 1 | 1 | EJ47600410 | Elect</ | |

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A			
R851	1	1	1	RI05272180	2.7k Ω	Trimming
R852	1	1	1	RI05272180	2.7k Ω	
R855	1	1	1	RA02220600	2.2k Ω	
R856	1	1	1	RI05102180	1k Ω	
R901	1	1	1	RI05684180	680k Ω	
R902	1	1	1	RI05684180	680k Ω	
R905	1	1	1	RI05272180	2.7k Ω	
R906	1	1	1	RI05272180	2.7k Ω	
R907	1	1	1	RI05154180	150k Ω	
R908	1	1	1	RI05154180	150k Ω	
R909	1	1	1	RI05224180	220k Ω	
R910	1	1	1	RI05224180	220k Ω	
R911	1	1	1	RI05472180	4.7k Ω	
R912	1	1	1	RI05472180	4.7k Ω	
R913	1	1	1	RI05153180	15k Ω	
R914	1	1	1	RI05153180	15k Ω	
R915	1	1	1	RI05153180	15k Ω	
R916	1	1	1	RI05153180	15k Ω	
R917	1	1	1	RI05332180	3.3k Ω	
R918	1	1	1	RI05332180	3.3k Ω	
R919	1	1	1	RI05103180	10k Ω	
R920	1	1	1	RI05103180	10k Ω	
R921	1	1	1	RI05102180	1k Ω	
R922	1	1	1	RI05102180	1k Ω	
R923	1	1	1	RI05153180	15k Ω	
R924	1	1	1	RI05153180	15k Ω	
R925	1	1	1	RI05472180	4.7k Ω	
R926	1	1	1	RI05472180	4.7k Ω	
R927	1	1	1	RI05153180	15k Ω	
R928	1	1	1	RI05153180	15k Ω	
R929	1	1	1	RI05151180	150 Ω	
R930	1	1	1	RI05151180	150 Ω	
R931	1	1	1	RI05472180	4.7k Ω	
R932	1	1	1	RI05472180	4.7k Ω	
R933	1	1	1	RI05331180	330 Ω	
R934	1	1	1	RI05331180	330 Ω	
R935	1	1	1	RI05684180	680k Ω	
R936	1	1	1	RI05684180	680k Ω	
R937	1	1	1	RI05124180	120k Ω	
R938	1	1	1	RI05124180	120k Ω	
R939	1	1	1	RI05102180	1k Ω	
R940	1	1	1	RI05102180	1k Ω	
R941	1	1	1	RI05682180	6.8k Ω	
R942	1	1	1	RI05682180	6.8k Ω	
R943	1	1	1	RI05104180	100k Ω	
R944	1	1	1	RI05104180	100k Ω	
R947	1	1	1	RA02220600	2.2k Ω	Trimming
R948	1	1	1	RI05102180	1k Ω	
R951	1	1	1	RI05333180	33k Ω	
R952	1	1	1	RI05333180	33k Ω	
R953	1	1	1	RI05104180	100k Ω	
R954	1	1	1	RI05104180	100k Ω	
R955	1	1	1	RI05333180	33k Ω	
R956	1	1	1	RI05333180	33k Ω	
R957	1	1	1	RI05152180	1.5k Ω	
RE01	1	1	1	RI05561180	560 Ω	1/6W
RE03	1	1	1	RI05472180	4.7k Ω	
RE04	1	1	1	GD05472160	4.7k Ω	
RE05	1	1	1	RI05684180	680k Ω	
RE06	1	1	1	RI05124180	120k Ω	
RE11	4	4	4	GD05684180	680k Ω	
RE14	1	1	1	GD05105180	1M Ω	
RE15	1	1	1	GD05105180	1M Ω	
RE16	1	1	1	GD05333180	33k Ω	
RE17	1	1	1	GD05333180	33k Ω	
RE18	1	1	1	GD05560160	56 Ω	1/6W
RE19	1	1	1	GD05334160	330k Ω	1/6W
RE20	1	1	1	GD05334160	330k Ω	1/6W

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A			
RG01	1	1	1	RI05102180	1k Ω	
RG02	1	1	1	RI05102180	1k Ω	
RG03	1	1	1	RI05154180	150k Ω	
RG04	1	1	1	RI05154180	150k Ω	
RG05	1	1	1	RI05275180	2.7M Ω	
RG06	1	1	1	RI05275180	2.7M Ω	
RG07	1	1	1	RI05684180	680k Ω	
RG08	1	1	1	RI05684180	680k Ω	
RG09	1	1	1	RI05221180	220 Ω	
RG10	1	1	1	RI05221180	220 Ω	
RG11	1	1	1	RI05562180	5.6k Ω	
RG12	1	1	1	RI05562180	5.6k Ω	
RG13	1	1	1	RI05102180	1.2k Ω	
RG14	1	1	1	RI05102180	1.2k Ω	
RG15	1	1	1	RI05103180	10k Ω	
RG16	1	1	1	RI05103180	10k Ω	
RG17	1	1	1	RI05184180	180k Ω	
RG18	1	1	1	RI05184180	180k Ω	
RG19	1	1	1	RI05474180	470k Ω	
RG20	1	1	1	RI05474180	470k Ω	
RG21	1	1	1	RI05153180	15k Ω	
RG22	1	1	1	RI05153180	15k Ω	
RG23	1	1	1	RI05682180	6.8k Ω	
RG24	1	1	1	RI05682180	6.8k Ω	
RG25	1	1	1	RI05151180	150 Ω	
RG26	1	1	1	RI05151180	150 Ω	
RG27	1	1	1	RI05122180	1.2k Ω	
RG28	1	1	1	RI05122180	1.2k Ω	
RG29	1	1	1	RI05823180	82k Ω	
RG30	1	1	1	RI05823180	82k Ω	
RG31	1	1	1	RI05104180	100k Ω	
RG34	1	1	1	RI05102180	1k Ω	
RG35	1	1	1	RI05104180	100k Ω	
RG36	1	1	1	RI05102180	1k Ω	
RG37	1	1	1	RI05153180	15k Ω	
RG38	1	1	1	RI05153180	15k Ω	
RG51	1	1	1	RI05224180	220k Ω	
RG52	1	1	1	RI05122180	1.2k Ω	
RG54	1	1	1	RI05100180	10 Ω	
RG61	1	1	1	RI05684180	680k Ω	
RG62	1	1	1	RI05222180	2.2k Ω	
RG63	1	1	1	RI05271180	270 Ω	
RG64	1	1	1	RI05103180	10k Ω	
RG65	1	1	1	RI05124180	120k Ω	
RG66	1	1	1	RI05104180	100k Ω	
RG67	1	1	1	RI05104180	100k Ω	
RG68	1	1	1	RI05000180	0 Ω	
RK01	1	1	1	RI05392180	3.9k Ω	Trimming
RK02	1	1	1	RI05392180	3.9k Ω	
RK03	1	1	1	RA04730600	47k Ω	
RK04	1	1	1	RA04730600	47k Ω	
RK07	1	1	1	RI05101180	100 Ω	
RK08	1	1	1	RI05101180	100 Ω	
RK09	1	1	1	RI05472180	4.7k Ω	
RK10	1	1	1	RI05472180	4.7k Ω	
RK11	1	1	1	RI05224180	220k Ω	
RK12	1	1	1	RI05224180	220k Ω	

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A			
RK13	1	1	1	RI05333180	33kΩ	
RK14	1	1	1	RI05333180	33kΩ	
RK15	1	1	1	RI05392180	3.9kΩ	
RK16	1	1	1	RI05392180	3.9kΩ	
RK17	1	1	1	RI05331180	330Ω	
RK18	1	1	1	RI05331180	330Ω	
RK19	1	1	1	RI05392180	3.9kΩ	
RK20	1	1	1	RI05392180	3.9kΩ	
RK23	1	1	1	RI05105180	1MΩ	
RK24	1	1	1	RI05105180	1MΩ	
RK25	1	1	1	RI05103180	10kΩ	
RK26	1	1	1	RI05103180	10kΩ	
RK27	1	1	1	RI05272180	2.7kΩ	
RK28	1	1	1	RI05272180	2.7kΩ	
RK29	1	1	1	RI05104180	100kΩ	
RK30	1	1	1	RI05104180	100kΩ	
RK31	1	1	1	RI05472180	4.7kΩ	
RK32	1	1	1	RI05472180	4.7kΩ	
RK33	1	1	1	RI05152180	1.5kΩ	
RK34	1	1	1	RI05152180	1.5kΩ	
RK35	1	1	1	RI05684180	680kΩ	
RK36	1	1	1	RI05684180	680kΩ	
RK37	1	1	1	RI05392180	3.9kΩ	
RK38	1	1	1	RI05392180	3.9kΩ	
RK39	1	1	1	RI05124180	120kΩ	
RK40	1	1	1	RI05124180	120kΩ	
RK41	1	1	1	RA04730600	47kΩ	Trimming
RK42	1	1	1	RA04730600	47kΩ	Trimming
RK43	1	1	1	RI05472180	4.7kΩ	
RK44	1	1	1	RI05472180	4.7kΩ	
RK45	1	1	1	RI05153180	15kΩ	
RK46	1	1	1	RI05153180	15kΩ	
RK47	1	1	1	RI05224180	220kΩ	
RK48	1	1	1	RI05224180	220kΩ	
RK49	1	1	1	RI05275180	2.7MΩ	
RK50	1	1	1	RI05275180	2.7MΩ	
RK51	1	1	1	RI05333180	33kΩ	
RK52	1	1	1	RI05333180	33kΩ	
RK53	1	1	1	RI05222180	2.2kΩ	
RK54	1	1	1	RI05222180	2.2kΩ	
RK55	1	1	1	RI05472180	4.7kΩ	
RK56	1	1	1	RI05472180	4.7kΩ	
RK57	1	1	1	RI05562180	5.6kΩ	
RK58	1	1	1	RI05562180	5.6kΩ	
RK59	1	1	1	RI05682180	6.8kΩ	
RK60	1	1	1	RI05682180	6.8kΩ	
RK61	1	1	1	RI05122180	1.2kΩ	
RK62	1	1	1	RI05122180	1.2kΩ	
RK63	1	1	1	RI05332180	3.3kΩ	
RK64	1	1	1	RI05332180	3.3kΩ	
RK65	1	1	1	RI05560180	56Ω	
RK66	1	1	1	RI05560180	56Ω	
RK67	1	1	1	RI05101180	100Ω	
RK68	1	1	1	RI05101180	100Ω	
RK69	1	1	1	RI05392180	3.9kΩ	
RK70	1	1	1	RI05392180	3.9kΩ	
RK71	1	1	1	RI05681180	680Ω	
RK72	1	1	1	RI05681180	680Ω	
RK73	1	1	1	RA01040600	100kΩ	Trimming
RK74	1	1	1	RA01040600	100kΩ	Trimming
RK75	1	1	1	RI05105180	1MΩ	
RK76	1	1	1	RI05105180	1MΩ	
RK77	1	1	1	RI05474180	470kΩ	
RK78	1	1	1	RI05474180	470kΩ	
RK79	1	1	1	RI05103180	10kΩ	
RK80	1	1	1	RI05103180	10kΩ	
RK81	1	1	1	RI05103180	10kΩ	
RK82	1	1	1	RI05103180	10kΩ	
RK83	1	1	1	RI05561180	560Ω	
RK84	1	1	1	RI05561180	560Ω	
RK85	1	1	1	RD05030190	50kΩ	Variable
RK86	1	1	1	RI05473180	47kΩ	
RK87	1	1	1	RI05103180	10kΩ	
RK88	1	1	1	RI05103180	10kΩ	
RK90	1	1	1	RI05102180	1kΩ	
RK92	1	1	1	RI05102180	1kΩ	
RK93	1	1	1	RI05472180	4.7kΩ	
RK94	1	1	1	RI05472180	4.7kΩ	
RK96	1	1	1	RI05000180	0Ω	
RL01	1	1	1	RI05022180	2.2Ω	
RL02	1	1	1	RI05022180	2.2Ω	
RL03	1	1	1	RI05222180	2.2kΩ	
RL04	1	1	1	RI05222180	2.2kΩ	
RL05	1	1	1	RI05472180	4.7kΩ	
RL06	1	1	1	RI05222180	2.2kΩ	
RL07	1	1	1	RA02230600	22kΩ	Trimming
RL08	1	1	1	RA02230600	22kΩ	Trimming
RL10	1	1	1	RI05101180	100Ω	
RL11	1	1	1	RI05101180	100Ω	
RL12	1	1	1	RI05000180	0Ω	
RL13	1	1	1	GD05472160	4.7kΩ	1/6W
RL51	1	1	1	RI05047180	4.7Ω	
RU01	1	1	1	RI05101180	100Ω	
RU02	1	1	1	RI05104180	100kΩ	
RU03	1	1	1	RI05224180	220kΩ	
RU04	1	1	1	RI05224180	220kΩ	
RU05	1	1	1	RI05224180	220kΩ	
RU06	1	1	1	RI05224180	220kΩ	
RU07	1	1	1	RI05334180	330kΩ	
RU08	1	1	1	RI05224180	220kΩ	
RU09	1	1	1	RI05102180	1kΩ	
RU10	1	1	1	RA04730600	47kΩ	Trimming
RU11	1	1	1	GD05561140	560Ω	1/4W

- (U) for U.S.A.
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REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A				U	N	A		
Q603	1	1	1	BA20002210	PK01-SEMICONDUCTORS	QK39	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q701	1	1	1	HX413281R0	Semiconductor DTC-124S	QK40	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q702	1	1	1	HC10112060	Transistor 2SD1328 R Chip	QK41	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q703	1	1	1	HT410203A0	IC Headphone Amp	QK42	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q704	1	1	1	BA20002210	Transistor 2SD1020 (H.F)	QK44	1	1	1	BA20002210	Semiconductor DTC124S
Q801	1	1	1	HX410302A0	Semiconductor DTC-124S	QK45	1	1	1	BA20002210	Semiconductor DTC124S
Q802	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	QK46	1	1	1	BA20002210	Semiconductor DTC124S
Q803	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QK47	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q804	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QK48	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q805	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QL01	1	1	1	HT320011L0	Transistor 2SC2001 L
Q806	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QL02	1	1	1	HT320011L0	Transistor 2SC2001 L
Q807	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QL03	1	1	1	HT409732B0	Transistor 2SD973 (R,S)
Q808	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	Δ QU01	1	1	1	HT410203A0	Transistor 2SD1020 (H,F)
Q809	1	1	1	HC10055020	IC AN6291S	QU02	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
Q901	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QU03	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
Q902	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QU04	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
Q903	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK01	1	1	1	HZ20005020	Diode MA153 Chip
Q904	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK02	1	1	1	HZ20005020	Diode MA153 Chip
Q905	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK03	1	1	1	HZ20003020	Diode MA151K Chip
Q906	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK04	1	1	1	HZ20003020	Diode MA151K Chip
Q907	1	1	1	HC10055020	IC AN6291S	DK05	1	1	1	HZ20001020	Diode MA151WK Chip
QG01	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK11	1	1	1	HZ20003020	Diode MA151K Chip
QG02	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK12	1	1	1	HZ20003020	Diode MA151K Chip
QG03	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK20	1	1	1	HZ20001020	Diode MA151WK Chip
QG04	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK21	1	1	1	HZ20001020	Diode MA151WK Chip
QG05	1	1	1	BA20002210	Semiconductor DTC124S	DK22	1	1	1	HD30034060	Zener RD3.6E
QG06	1	1	1	BA20002210	Semiconductor DTC124S	DL01	1	1	1	HZ20003020	Diode MA151K Chip
QG07	1	1	1	BA20002210	Semiconductor DTC124S	Δ DU01	1	1	1	HD30002020	Zener
QG08	1	1	1	BA20002210	Semiconductor DTC124S	DU02	1	1	1	HD20001000	Diode IS1555 etc.
QG10	1	1	1	BA20002210	Semiconductor DTC124S	DU05	1	1	1	HD20001000	Diode IS1555 etc.
QG18	1	1	1	BA20002210	Transistor 2SA1162 G	DU06	1	1	1	HD20001000	Diode IS1555 etc.
QG51	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	J701	1	1	1	YJ01002280	PK01-MISCELLANEOUS
QG61	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip						Jack
QG62	1	1	1	BA20002210	Semiconductor DTC124S	JG01	1	1	1	YJ01002280	Jack Mic L
QK01	1	1	1	BA20002210	Semiconductor DTC124S	JG02	1	1	1	YJ01002280	Jack Mic R
QK02	1	1	1	BA20002210	Semiconductor DTC124S	JG03	1	1	1	BY01130010	Jack RCA/DIN
QK03	1	1	1	BA20002210	Semiconductor DTC124S	JK01	1	1	1	YJ04000840	Jack DC Input
QK04	1	1	1	BA20002210	Semiconductor DTC124S	JK02	1	1	1	YJ06003090	Jack (9P)
QK05	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK03	1	1	1	YJ06003270	Jack (7P)
QK06	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK04	1	1	1	YJ06003040	Jack (4P)
QK11	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK05	1	1	1	YJ06003090	Jack (9P)
QK12	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK06	1	1	1	YJ06002560	Jack (6P)
QK13	1	1	1	HX413281R0	Transistor 2SD1328 R Chip	JK07	1	1	1	YJ06002560	Jack (6P)
QK14	1	1	1	HX413281R0	Transistor 2SD1328 R Chip	JK08	1	1	1	YJ06002540	Jack (4P)
QK15	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	JK09	1	1	1	YJ06002560	Jack (6P)
QK16	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	JK11	1	1	1	YJ06003040	Jack (4P)
QK17	1	1	1	HX413281R0	Transistor 2SD1328 R						
QK18	1	1	1	HX413281R0	Transistor 2SD1328 R						
QK19	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip						
QK20	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip						
QK21	1	1	1	BA20002210	Semiconductor DTC124S						
QK22	1	1	1	BA20002210	Semiconductor DTC124S						
QK23	1	1	1	BA20002210	Semiconductor DTC124S						
QK24	1	1	1	BA20002210	Semiconductor DTC124S						
QK25	1	1	1	BA20002210	Semiconductor DTC124S						
QK26	1	1	1	BA20002210	Semiconductor DTC124S						
QK27	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK28	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK29	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK30	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK33	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK34	1	1	1	BA20002210	Semiconductor DTC124S						
QK35	1	1	1	HC406600Z0	IC 4066						
QK37	1	1	1	HC406600Z0	IC 4066						

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REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A				U	N	A			
JL01	1	1	1	YJ06003050	Jack (5P)						P601-RESISTORS (All Resistors are ±5% & 1/8W Chip)	
L601	1	1	1	LS10440060	M.P.X. Coil	R601	1	1	1	R105224180		220kΩ
LG61	1	1	1	LS10440060	M.P.X. Coil	R603	1	1	1	R105224180		220kΩ
LJ01	1	1	1	LC22260100	Choke Coil 22mH	R604	1	1	1	R105224180		220kΩ
LJ02	1	1	1	LC22260100	Choke Coil 22mH	R605	1	1	1	R105102180		1kΩ
LK01	1	1	1	LC25650700	Choke Coil	R606	1	1	1	R105153180		15kΩ
LK02	1	1	1	LC25650700	Choke Coil	R607	1	1	1	R105473180		47kΩ
LK03	1	1	1	LC24760520	Choke Coil	R608	1	1	1	R105684180		680kΩ
LK04	1	1	1	LC24760520	Choke Coil	R609	1	1	1	R105271180		270Ω
						R610	1	1	1	R105222180		2.2kΩ
LL01	1	1	1	TC10110010	OSC Transf.	R612	1	1	1	R105224180	220kΩ	
△ LL51	1	1	1	TC10200090	OSC Transf.	R613	1	1	1	R105224180	220kΩ	
LL52	1	1	1	LC14730040	Choke Coil	R614	1	1	1	R105153180	15kΩ	
LL53	1	1	1	LC21050700	Choke Coil	R615	1	1	1	R105102180	1kΩ	
S701	1	1	1	SS01030040	Slide Switch Speaker Monitor Mode	R616	1	1	1	R105473180	47kΩ	
S702	1	1	1	SS01020490	Slide Switch Speaker Monitor ON/OFF	R617	1	1	1	R105332180	3.3kΩ	
SK01	1	1	1	SP02020730	Push Switch Limiter	R618	1	1	1	R105472180	4.7kΩ	
SK02	1	1	1	SP02020740	Push Switch Batt/Light	R619	1	1	1	R105332180	3.3kΩ	
SK03	1	1	1	SP02020730	Push Switch Monitor	R620	1	1	1	R105472180	4.7kΩ	
SK04	1	1	1	SP02020740	Push Switch Rec/Play	R621	1	1	1	R105330180	33Ω	
						R622	1	1	1	R105124180	120kΩ	
						R623	1	1	1	R105272180	2.7kΩ	
						R624	1	1	1	R105104180	100kΩ	
						R625	1	1	1	R105104180	100kΩ	
						R667	1	1	1	R105000180	0Ω	
						Q601	1	1	1	HX406012B0	P601-SEMICONDUCTORS Transistor 2SD601 (R,S) Chip Transistor 2SD1030 (R,S) Chip IC HA12048	
						Q602	1	1	1	HX410302A0		
						Q604	1	1	1	HC10062010		
P601	1	1	1	WB154T1520	P.W. Board Dolby (L)	J601	1	1	1	YP06002560	P601-MISCELLANEOUS Plug (6P) Plug (6P)	
	1	1	1	ZZ154T1520	P.W. Board Assembly	J602	1	1	1	YP06002560		
C601	1	1	1	EJ47502510	Elect 4.7μF 25V							
C603	1	1	1	DD45271300	Ceramic 270pF ±5%							
C604	1	1	1	EJ22505010	Elect 2.2μF 50V							
C605	1	1	1	EJ10700610	Elect 100μF 6.3V							
C606	1	1	1	EV68401670	Elect 0.68μF 16V							
C607	1	1	1	EJ22405010	Elect 0.22μF 50V							
C608	1	1	1	DF15682350	Film 6800pF ±5%							
C609	1	1	1	EJ22505010	Elect 2.2μF 50V							
C610	1	1	1	EJ33503510	Elect 3.3μF 35V							
C611	1	1	1	DF15333350	Film 0.033μF ±5%							
C612	1	1	1	DF15492350	Film 4700pF ±5%							
C613	1	1	1	EJ33503510	Elect 3.3μF 35V							
C614	1	1	1	EJ22505010	Elect 2.2μF 50V							
C615	1	1	1	EJ47502510	Elect 4.7μF 25V							
C616	1	1	1	EJ22505010	Elect 2.2μF 50V							
C617	1	1	1	EJ33503510	Elect 3.3μF 35V							
C618	1	1	1	EV68401670	Elect 0.68μF 16V							
C619	1	1	1	EJ22405010	Elect 0.22μF 50V							
C620	1	1	1	DF15682350	Film 6800pF ±5%							
C621	1	1	1	EJ22505010	Elect 2.2μF 50V							
C622	1	1	1	DF15472350	Film 4700pF ±5%							
C623	1	1	1	DF15333350	Film 0.033μF ±5%							
C624	1	1	1	EJ33503510	Elect 3.3μF 35V							
C625	1	1	1	EJ22601610	Elect 22μF 16V							
C626	1	1	1	EJ22505010	Elect 2.2μF 50V							
C627	1	1	1	EJ22505010	Elect 2.2μF 50V							
C628	1	1	1	DK46562300	Ceramic 5600pF ±10%							
C629	1	1	1	EJ22505010	Elect 2.2μF 50V							
C630	1	1	1	EJ22505010	Elect 2.2μF 50V							
C631	1	1	1	EJ10700610	Elect 100μF 6.3V							

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REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A				U	N	A		
					P602-RESISTORS (All Resistors are $\pm 5\%$ & 1/8W Chip)						PJ01-SEMICONDUCTORS
R651	1	1	1	RI05224180	220k Ω	QJ01	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
R652	1	1	1	RI05224180	220k Ω	QJ02	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
R653	1	1	1	RI05102180	1k Ω	QJ03	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
R654	1	1	1	RI05153180	15k Ω	QJ04	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
R655	1	1	1	RI05473180	47k Ω						PJ01-MISCELLANEOUS
R656	1	1	1	RI05224180	220k Ω	JJ01	1	1	1	YJ06003040	Jack (4P)
R657	1	1	1	RI05224180	220k Ω	WJ01	1	1	1	YB00110140	Connective Cord (4P)
R658	1	1	1	RI05102180	1k Ω						
R659	1	1	1	RI05153180	15k Ω						
R660	1	1	1	RI05473180	47k Ω						
											PK02-MIC MODE CIRCUIT BOARD
R661	1	1	1	RI05332180	3.3k Ω	PK02	1	1	1	WB154T1540	P.W. Board Mic Mode
R662	1	1	1	RI05472180	4.7k Ω		1	1	1	ZZ154T1540	P.W. Board Assembly
R663	1	1	1	RI05472180	4.7k Ω						PK02-SEMICONDUCTOR
R664	1	1	1	RI05332180	3.3k Ω	DS02	1	1	1	HZ20003020	Diode MA151K Chip
R665	1	1	1	RI05330180	33 Ω						PK02-MISCELLANEOUS
R666	1	1	1	RI05272180	2.7k Ω	S201	1	1	1	SS02020740	Slide Switch Mic Mode
					P602-SEMICONDUCTOR IC HA12048						
Q651	1	1	1	HC10062010							PK03-MIC ATTENUATOR CIRCUIT BOARD
J651	1	1	1	YP06002540	Plug (4P)	PK03	1	1	1	WB154T1550	P.W. Board Mic Attenuator
J652	1	1	1	YP06002560	Plug (6P)		1	1	1	ZZ154T1550	P.W. Board Assembly
					P602-MISCELLANEOUS						PK03-MISCELLANEOUS
											Slide Switch Mic Att.
PJ01	1	1	1	WC154T2430	P.W. Board Tape EQ.	S301	1	1	1	SS01030050	
	1	1	1	ZZ154T2430	P.W. Board Assembly						
					PJ01-CAPACITORS						PK04-MONITOR CIRCUIT BOARD
CJ01	1	1	1	DD45121300	Ceramic 120pF $\pm 5\%$	PK04	1	1	1	WZ154T0020	P.W. Board Monitor
CJ02	1	1	1	DD45121300	Ceramic 120pF $\pm 5\%$		1	1	1	ZZ154T0020	P.W. Board Assembly
CJ03	1	1	1	EJ10601610	Elect 10 μ F 16V						PK04-RESISTORS
CJ04	1	1	1	EJ10601610	Elect 10 μ F 16V						(All Resistors are $\pm 5\%$ & 1/8W Chip)
CJ05	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$	RE07	4	4	4	RI05104180	100k Ω
CJ06	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$	RE10					
CJ09	1	1	1	EJ10601610	Elect 10 μ F 16V						PK04-SEMICONDUCTORS
CJ10	1	1	1	EJ10601610	Elect 10 μ F 16V	QK49	1	1	1	BA20002210	Semiconductor DTC124S
CJ11	1	1	1	DF15223350	Film 0.022 μ F $\pm 5\%$	QK50	1	1	1	BA20002210	Semiconductor DTC124S
CJ12	1	1	1	DF15223350	Film 0.022 μ F $\pm 5\%$						
											PM01-MOTOR CIRCUIT BOARD
CJ13	1	1	1	EJ22505010	Elect 2.2 μ F 50V	PM01	1	1	1	WC154T2420	P.W. Board Motor
CJ14	1	1	1	EJ22505010	Elect 2.2 μ F 50V		1	1	1	ZZ154T2420	P.W. Board Assembly
CJ15	1	1	1	EJ47601610	Elect 47 μ F 16V						PM01-CAPACITORS
CJ16	1	1	1	EJ47601610	Elect 47 μ F 16V	CM01	1	1	1	EJ22505010	Elect 2.2 μ F 50V
CJ17	1	1	1	EA10701610	Elect 100 μ F 16V	CM02	1	1	1	EJ10700610	Elect 100 μ F 6.3V
CJ21	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$	CM03	1	1	1	EA22701630	Elect 220 μ F 16V
CJ22	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$	CM04	1	1	1	EJ10601610	Elect 10 μ F 16V
CJ23	1	1	1	DD45151300	Ceramic 150pF $\pm 5\%$	CM05	1	1	1	EJ10601610	Elect 10 μ F 16V
CJ24	1	1	1	DD45151300	Ceramic 150pF $\pm 5\%$	CM06	1	1	1	EJ10701010	Elect 100 μ F 10V
					PJ01-RESISTORS (All Resistors are $\pm 5\%$ & 1/8W Chip)	CM07	1	1	1	EJ22601610	Elect 22 μ F 16V
RJ03	1	1	1	RI05154180	150k Ω	CM08	1	1	1	EJ22601610	Elect 22 μ F 16V
RJ04	1	1	1	RI05154180	150k Ω	CM09	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$
RJ05	1	1	1	RI05820180	82 Ω	CM10	1	1	1	DF15334350	Film 0.33 μ F $\pm 5\%$
RJ06	1	1	1	RI05820180	82 Ω						
RJ07	1	1	1	RI05104180	100k Ω	CM11	1	1	1	DK18103310	Ceramic 0.01 μ F +80%, -20%
RJ08	1	1	1	RI05104180	100k Ω	CM12	1	1	1	EJ10505010	Elect 1 μ F 50V
RJ09	1	1	1	RI05562180	5.6k Ω						
RJ10	1	1	1	RI05562180	5.6k Ω						
RJ11	1	1	1	RI05154180	150k Ω						
RJ12	1	1	1	RI05154180	150k Ω						
RJ13	1	1	1	RI05153180	15k Ω						
RJ14	1	1	1	RI05153180	15k Ω						
RJ15	1	1	1	RI05271180	270 Ω						
RJ16	1	1	1	RI05271180	270 Ω						
RJ17	1	1	1	RI05122180	1.2k Ω						
RJ18	1	1	1	RI05122180	1.2k Ω						
RJ19	1	1	1	RI05332180	3.3k Ω						
RJ20	1	1	1	RI05332180	3.3k Ω						
RJ21	1	1	1	RI05333180	33k Ω						
RJ22	1	1	1	RI05333180	33k Ω						

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

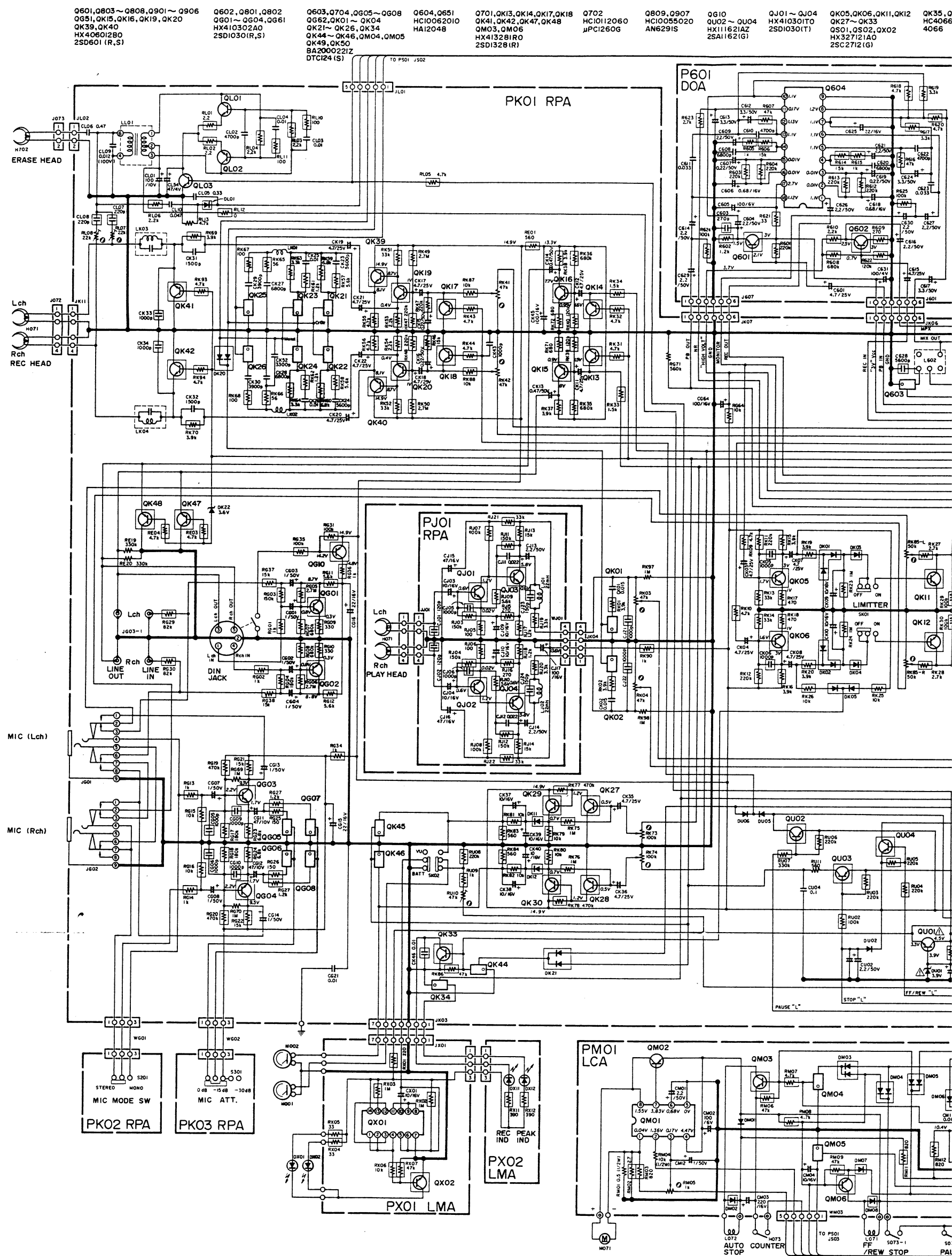
REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
RM01	1	1	1	NB50052390	PM01-RESISTORS (All Resistors are ±5% & 1/8W Chip) 0.5Ω 1/2W
RM02	1	1	1	RI05027180	2.7Ω
RM03	1	1	1	RI05821180	820Ω
RM04	1	1	1	NB51032200	10kΩ 1/2W
RM05	1	1	1	RA01020600	1kΩ Trimming
RM06	1	1	1	RI05473180	47kΩ
RM07	1	1	1	RI05472180	4.7kΩ
RM08	1	1	1	RI05472180	4.7kΩ
RM09	1	1	1	RI05473180	47kΩ
RM10	1	1	1	RI05473180	47kΩ
RM11	1	1	1	RI05821180	820Ω
RM12	1	1	1	RI05821180	820Ω
QM01	1	1	1	HC10037020	PM01-SEMICONDUCTORS IC AN6612
QM02	1	1	1	HT10966100	Transistor 2SA966 0
QM03	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QM04	1	1	1	BA20002210	Semiconductor DTC124S
QM05	1	1	1	BA20002210	Semiconductor DTC124S
QM06	1	1	1	HX413281R0	Transistor 2SD1328 Chip
QM07	1	1	1	HC10039210	IC BA337
QM08	1	1	1	HC10024020	IC DN6838
DM01	1	1	1	HD20015030	Diode DS-153D
DM02	1	1	1	HZ20001020	Diode MA151WK Chip
DM03	1	1	1	HZ20001020	Diode MA151WK Chip
DM04	1	1	1	HZ20001020	Diode MA151WK Chip
DM05	1	1	1	HZ20001020	Diode MA151WK Chip
DM06	1	1	1	HZ20001020	Diode MA151WK Chip
DM07	1	1	1	HZ20001020	Diode MA151WK Chip
DM08	1	1	1	HZ20001020	Diode MA151WK Chip
WM01	1	1	1	YB00190100	PM01-MISCELLANEOUS Connective Cord
WM02	1	1	1	YZ03060260	Jumper Lead
WM03	1	1	1	YU05057800	Jumper Lead
PS01	1	1	1	WC154T2410	PS01-SWITCH CIRCUIT BOARD P.W. Board Switch
	1	1	1	ZZ154T2410	P.W. Board Assembly
CS01	1	1	1	DF15334350	PS01-CAPACITOR Film 0.33μF ±5%
RS01	1	1	1	RI05153180	PS01-RESISTORS (All Resistors are ±5% & 1/8W Chip) 15kΩ
RS02	1	1	1	RI05332180	3.3kΩ
RS03	1	1	1	RI05182180	1.8kΩ
RS04	1	1	1	RB02020020	2kΩ Variable
RS06	1	1	1	RB02020020	2kΩ Variable
RS07	1	1	1	GJ05010010	1Ω 1W
RS08	1	1	1	RI05103180	10kΩ
RS09	1	1	1	RI05473180	47kΩ
RS10	1	1	1	RI05153180	15kΩ
RS11	1	1	1	RI05682180	6.8kΩ
RS12	1	1	1	RI05124180	120kΩ
RS13	1	1	1	RI05684180	680kΩ
RS14	1	1	1	RI05102180	1kΩ
RS15	1	1	1	GD05564180	560kΩ
RS16	1	1	1	GD05104180	100kΩ
QS01	1	1	1	HX327121A0	PS01-SEMICONDUCTORS Transistor 2SC2712 G Chip
QS02	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
DS01	1	1	1	HZ20003020	Diode MA151K Chip
JS01	1	1	1	YB00130210	PS01-MISCELLANEOUS Connective Cord
JS02	1	1	1	YB00290060	Connective Cord
SS01	1	1	1	SS01020470	Slide Switch Memory Rew.
SS02	1	1	1	SS01020470	Slide Switch MPX Filter
SS03	1	1	1	SS01030030	Slide Switch N.R.
SS04	1	1	1	SS02030250	Slide Switch Tape Selector
PX01	1	1	1	WC154T2440	PX01-METER LED CIRCUIT BOARD P.W. Board Meter LED
	1	1	1	ZZ154T2440	P.W. Board Assembly
CX01	1	1	1	EJ10601610	PX01-CAPACITORS Elect 10μF 16V
RX01	1	1	1	RI05221180	PX01-RESISTORS (All Resistors are ±5% & 1/8W Chip) 220Ω
RX02	1	1	1	RI05105180	1MΩ
RX03	1	1	1	RI05105180	1MΩ
RX04	1	1	1	RI05330180	33Ω
RX05	1	1	1	RI05330180	33Ω
RX06	1	1	1	RI05103180	10kΩ
RX07	1	1	1	RI05473180	47kΩ
RX11	1	1	1	RI05391180	390Ω
RX12	1	1	1	RI05391180	390Ω
QX01	1	1	1	HC401100Z0	PX01-SEMICONDUCTORS IC 4011
QX02	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
DX01	1	1	1	HI10017210	L.E.D. LED
DX02	1	1	1	HI10017210	L.E.D. LED
WX01	1	1	1	YB00120170	PX01-MISCELLANEOUS Connective Cord (7P)
PX02	1	1	1	WB154T1530	PX02-PEAK/REC INDICATOR CIRCUIT BOARD P.W. Board Peak/Rec Indicator
	1	1	1	ZZ154T1530	P.W. Board Assembly
DX11	1	1	1	HI10056020	PZ01-SEMICONDUCTORS L.E.D. Rec.
DX02	1	1	1	HI10025020	L.E.D. Peak Ind.
(W01-99)	Assembly and Wiring				
(T01-99)	Adjustment				
(X01-00)	Correction				
NOTE ON SAFETY: Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.					

9. TECHNICAL SPECIFICATIONS

Tape Drive System	Single Capstan Drive
Cartridge	Philips type compact cassette
Track System	Compatible Stereo 4-track 2-channel
Tape Speed	4.75 cm/sec.
Heads	3 Head System
	Record: Super Hard Metal Alloy
	Playback: Super Hard Metal Alloy
	Erase: Dual Gap Metal Alloy
Motor	DC Servo Motor
Overall Frequency Response at 25 dB below 0 VU	
Normal Tape	30 Hz ~16 kHz
CrO ₂ Tape	20 Hz ~18 kHz
Metal Tape	20 Hz ~20 kHz
Signal-to-Noise Ratio: with A-Curve Filter to 3% Distortion (K3)	
Dolby OFF	59 dB
Dolby B (ON)	65 dB
dbx (ON)	80 dB
Wow and Flutter	
DIN WTD	0.15%
Outputs	
Line Level/Impedance	500 mV/3 k ohms
Headphone Level/Impedance	3 mV/8 ohms
DIN Level/Impedance	500 mV/3 k ohms
Input (Level at 0 VU)	
Line Sensitivity/Impedance	100 mV/50 k ohms
Mic Sensitivity/Impedance	0.32 mV/10 k ohms
DIN Sensitivity/Impedance	0.1 mV/k ohms
Fast Rewind Time	110 sec. (C-60)
Fast Forward Time	110 sec. (C-60)
Power Requirements	
	3 Batteries: R20/Size "D"
	Rechargeable Battery: Model RBD 430 (optional)
	AC adapter: 110-120V, 220-240V
	AC 50, 60 Hz
Power Consumption	AC 6.5W/DC 3.5W
Dimensions	
Panel Width	227 mm
Panel Height	50 mm
Depth	165 mm
Weight	1.3 kg

Specifications and appearance are subject to change for modification without notice.

10. SCHEMATIC DIAGRAM



MODEL CP430/PMD430

Q001~Q004
HX41030(T)
2SD1030(T)

QK05,QK06,QK11,QK12
QK27~QK33
HC40660020
4066

QL01,QL02
HT32001(L)
2SC2001(L)

QL03
HT31383(R)
2SC1383(R)

QMO1
HC10037020
AN6612

QMO2
HT10966100
2SA966(I)

QMO3
HC10039210
BA337

QMO4
HC10024020
DN6838

QMO5
HT1846280
2SC1846
(R,S)

QMO6
HC40110020
4011

DK03,DK04
DK11,DK12,DK20
DL01,DL02,DL03
HZ20003020
MA151K

DK05,DK21
DM02~DM08
HZ20001020
MA151WK

DM01
H020015030
DS-153D

DU01
H030002020
ZENER 3.9V

DU02
H020001000
IS1555

DX01,DX02
H10017210
LED

DX11
H10056020
LED

DX12
H10025020
LED

NOTE

CHIP RESISTOR

CHIP CAPACITOR

CHIP DIODE

CHIP TRANSISTOR

OTC124(S)
CHIP PARTS

Q703
HT410203A
2SD1020(HF)

Q601, Q603~Q608
Q610
Q901~Q906, Q951
QU02~QU04
QK15, QK16
QK19, QK20
QK30, QK40

2SD1030(R,S)
Q602, Q601~Q604
Q661, Q601, Q602

2SD1328(R)
Q701, QK13, QK14
QK17, QK18, QK41
QK42, QK47, QK48
QMO3, QMO6

2SC2712(G)
QK05, QK06
QK11, QK12
QK27~QK33
Q501, Q502, QX02

2SD1030(T)
QJ01~QJ04

DTIC124(S)
Q603, Q704
Q605~Q608, Q662
QK01~QK04
QK21~QK26, QK34
QK44~QK46
QMO4, QMO5
QK49, QK50

2SC2001(L) 2SA966(I)
QL01, QL02 QMO2
2SC1383(R)
QL03

2SC1846(R,S)
QU01

TOP VIEW
20
JPC1260G
Q702

TOP VIEW
18
HAI2048
Q604, Q651

TOP VIEW
22
AN6291S
Q809, Q907

TOP VIEW
14
4066 4011
QK35, QK37 QX01

TOP VIEW
8
AN6612
QMO1

FRONT VIEW
9
BA337
QMO7

DN6383
QMO8

2SD1020(HF)
Q703

Components and wiring are subject to change for modification without notice.

MODEL CP430 TECHNICAL SPECIFICATIONS (DIN)

Tape Drive System	Single Capstan Drive
Cartridge	Philips type compact cassette
Track System	Compatible Stereo 4-track 2-channel
Tape Speed	4.75 cm/sec.
Heads	3 Head System
	Record: Super Hard Metal Alloy
	Playback: Super Hard Metal Alloy
	Erase: Dual Gap Metal Alloy
Motor	DC Servo Motor
Overall Frequency Response at 25 dB below 0 VU	
Normal Tape	30 Hz ~ 16 kHz
CrO ₂ Tape	20 Hz ~ 18 kHz
Metal Tape	20 Hz ~ 20 kHz
Signal-to-Noise Ratio: with A-Curve Filter to 3% Distortion (K3)	
Dolby OFF	59 dB
Dolby B (ON)	65 dB
dbx (ON)	80 dB
Wow and Flutter	
DIN WTD	0.15%
Outputs	
Line Level/Impedance	500 mV/3 k ohms
Headphone Level/Impedance	3 mV/8 ohms
DIN Level/Impedance	500 mV/3 k ohms
Input (Level at 0 VU)	
Line Sensitivity/Impedance	100 mV/50 k ohms
Mic Sensitivity/Impedance	0.32 mV/10 k ohms
DIN Sensitivity/Impedance	0.1 mV/k ohms
Fast Rewind Time	110 sec. (C-60)
Fast Forward Time	110 sec. (C-60)
Power Requirements	
	3 Batteries: R20/Size "D"
	Rechargeable Battery: Model RBD 430 (optional)
	AC adapter: 110-120V, 220-240V
	AC 50, 60 Hz
Power Consumption	AC 6.5W/DC 3.5W
Dimensions	
Panel Width	227 mm
Panel Height	50 mm
Depth	165 mm
Weight	1.3 kg

Mode d'entraînement	Simple cabestan
Type de cassette	Philips compact cassette
Pistes	Stéréo 4 pistes, 2 canaux
Vitesse de bande	4,75 cm/sec.
Têtes	Système à 3 têtes
	Enregistrement: Alliage Métal Super Dur
	Lecture: Alliage Métal Super Dur
	Effacement: Alliage Métal Entrefer Double
Moteur	Servo-moteur CC
Réponse en fréquence à 25 dB	
Bande normale	30 Hz à 16 kHz
Bande CrO ₂	20 Hz à 18 kHz
Bande metal	20 Hz à 20 kHz
Rapport signal/bruit: avec le Filtre de Courbe A sur 3%: Distorsion (K3)	
Sans Dolby (OFF)	59 dB
Avec Dolby B (ON)	65 dB
dbx (ON)	80 dB
Pleurage et scintillement:	
DIN pondéré	0,15%
Sorties	
Line: niveau/impédance	500 m V/3 k ohms
Casque: niveau/impédance	3 m V/8 ohms
DIN: niveau/impédance	500 m V/3 k ohms
Entrées (niveau à 0 VU)	
Line: sensibilité/impédance	100 mV/50 k ohms
Mic: sensibilité/impédance	0.32 mV/10 k ohms
Impédance/sensibilité DIN	0.1 m V/k ohms
Temps de rebobinage rapide	110 sec (C-60)
Temps de bobinage rapide	110 sec (C-60)
Alimentation	
	3 Piles: R20/Dimension "D"
	Pile Rechargeable: Modèle RBD430 (en option)
	Adapteur AC: 110-120V, 220-240V
	AC 50, 60 Hz
Consommation	AC 6,5W/DC 3,5W
Dimensions	
Largeur du panneau	227 mm
Hauteur du panneau	50 mm
Profondeur	165 mm
Poids	1,3 kg

Bandtransport	Einzel-Capstan
Cassettentyp	Philips-CC-Cassette
Spurlage	Norm-Stereo
Bandgeschwindigkeit	4,75 m/sec.
Tonköpfe	Zweikopfsystem
Zusammensetzung Hi-B Permalloy	Aufnahme: Superhart-Metal-Alloy
	Wiedergabe: Superhart-Metal-Alloy
	Löschen: Doppelspalt-Metal-Alloy
Motoren	Gleichstrom-Servomotor
Gesamtfrequenzgang bei 25 dB unter 0 VU	
Standardband	30 Hz ~ 16 kHz
CrO ₂ Band	20 Hz ~ 18 kHz
Metallband	20 Hz ~ 20 kHz
Störspannungsabstand: mit A-Kurve-Filter bis 3%: Verzerrung (K3)	
Ohne Dolby (OFF)	59 dB
mit Dolby B (ON)	65 dB
mit dbx (ON)	80 dB
Gleichlaufschwankungen:	
DIN WTD	0,15%
Ausgänge	
Line-Pegel/Impedanz	500 mV/3 k ohm
Kopfhörer-Pegel/Impedanz	3 mV/8 ohm
DIN-Pegel/Impedanz	500 mV/3 k ohm
Eingänge (Pegel bei 0 VU)	
Line-Empfindlichkeit/Impedanz	100 mV/50 k ohm
Mic-Empfindlichkeit/Impedanz	0.32 mV/10 k ohm
DIN Empfindlichkeit/Impedanz	0.1 mV/k ohm
Umspulzeit	
Vorlauf	110 sec. (C-60)
Rücklauf	110 sec. (C-60)
Netzspannung	
	3 Batterien: R20/Größe "D"
	Wiederaufladbare Batterie: Modell RBD430 (Sonderzubehör)
	Netzadapter: 110-120V, 220-240V
	AC 50, 60 Hz
Stromverbrauch	
Abmessungen	Netz 6,5W/Gleichstrom 3,5W
Breite der Platte	227 mm
Höhe der Platte	50 mm
Tiefe	165 mm
Gewicht	1,3 kg